

The Outsourcing and Offshoring Competitive Landscape and its Uncertainties

by

Ziad R. Sultan

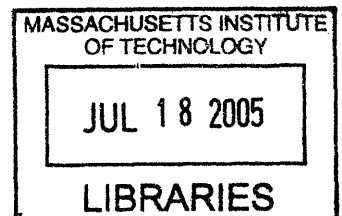
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ABSTRACT

The outsourcing and offshoring competitive landscape is rapidly and constantly evolving, presenting new challenges and opportunities for providers and customers alike. Outsourcing providers are pressured to increase the value delivered to clients. American providers are rushing offshore in an attempt to achieve savings through lower labor cost, while Indian providers are attempting to establish a stronger presence onshore, to capture a greater share of the high-value services market. Meanwhile, the importance of business processes is being emphasized at every level. These market forces add to the difficulty of reaching a coherent understanding of outsourcing as a whole. Market research and consulting reports address the different aspects of outsourcing in a very haphazard manner, and inexperienced customers are having difficulties formulating realistic expectations. Cost savings vary significantly from case to case, and many other factors need to be taken into account, such as the risk of intellectual property loss and hidden costs due to loss of flexibility, both of which can be hard to quantify. Benchmarks are being used extensively in the industry, and associated with penalties. While the use of benchmarks can be a powerful tool, clients need to remain flexible, or both parties could end up disappointed.

Thesis Supervisor: Patrick H. Winston
Title: Ford Professor of Engineering

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1. Introduction

Outsourcing refers to the practice during which a company subcontracts a business function to an outside supplier. This practice has been common within the U.S. economy for a long time, and is regarded as a mechanism that improves the efficiency of U.S. firms, because it allows every enterprise to focus on the set of functions it does best.

Among other factors, the reduction of communication costs and the standardization of software packages have now made it possible to outsource functions such as application development and maintenance, customer service, telemarketing, transaction processing, etc... to new destinations such as India and China, allowing outsourcing to become increasingly global.

With the globalization of outsourcing, and the accelerating migration of American jobs to countries with lower cost of labor, fears arose that the trend would have a catastrophic impact on the U.S. workforce.

The debate still rages, with diverging opinions as to whether short-term job losses due to outsourcing are compensated in the long run by gains to the American economy from free trade and consumption growth in low-wage countries.

Nobel Prize winner Paul Samuelson argues that the loss of competitive advantage to low-wage countries is permanent. On the other hand, Columbia professor Jagdish Bhagwati asserts that outsourcing offers substantial gains to the U.S. economy through cheaper imports and stronger markets for exports.

Data from Forrester Research, a leading IT consulting company, estimates that 400,000 U.S. jobs have moved abroad by 2003 and that the total would hit 3.3 million by 2015.

A report from the McKinsey Global Institute estimates that global outsourcing returns 45 to 55 percent in net savings to corporations, with added profits from the sale of American products (especially IT) to run the offshore operations.

The same report estimates that every dollar of U.S. labor cost that is spent offshore creates a global value of \$1.45 to \$1.47. Of this value created, the U.S. captures \$1.12 to \$1.14, while the receiving country captures, on average, just 33 cents.

Despite all the attempts from different groups to properly quantify the effects of outsourcing, public opinion is still divided, with a large part of the American population still fearing job losses if nothing is done to slow down offshoring.

Many IT executives have themselves contributed to this fear. For example, after IBM announced its plans to outsource 3,000 jobs overseas, one of the company executives was quoted as saying: "[Globalization] means shifting a lot of jobs, opening a lot of locations in places we had never dreamt of before, going where there's low-cost labor, low-cost competition, shifting jobs offshore."

Another example comes from the words of Nandan Nilekani, the chief executive of the India-based Infosys Technologies: "Everything you can send down a wire is up for grabs." Also, Hewlett-Packard C.E.O. Carly Fiorina warned that "there is no job that is America's God-given right anymore."

The microeconomic level of outsourcing is subject to as much speculation as the macroeconomic level. Because the practice of I.T. outsourcing and Business Process

Outsourcing (BPO) is fairly recent, companies find it hard to formulate realistic expectations regarding the benefits of outsourcing and off-shoring. The information that can be found is mostly anecdotal.

The first objective of this thesis is to present a clear overview of the competitive landscape for outsourcing and offshoring, its latest trends, as well as an explanation of the dynamics that are shaping the market. In the literature today, the numerous aspects of outsourcing are addressed separately, and the growing number of published reports does not draw a coherent picture. By presenting such an overview and including the latest trends of the market, this thesis will provide the initial knowledge required for further research on outsourcing and offshoring.

The overview will first focus on the different types of service providers, their concerns to remain competitive in a rapidly changing market, and the obstacles they are facing. After that, the analysis will turn to the demand side, by looking at the different types of customers, and the challenges facing each one of them before they reap the full benefits of outsourcing.

Building on the first part, the second goal of this thesis will be to argue that a lot of today's knowledge about outsourcing is uncertain, due mainly to the fact that individual outsourcing agreements depend on many factors which often vary widely from one deal to the next. Expectations about the cost savings achieved through outsourcing, as well as the value created (or lost) through the deals should be flexible.

As a first step in the analysis of uncertainty in outsourcing, the thesis will present a literature review that consists of a sample of four reports from some of the most influential research and consulting firms. This will give the reader a sense of how little

structure exists in today's outsourcing literature. The comments on these reports will lead to a discussion on some of the most important factors of uncertainty in outsourcing agreements: Intellectual Property Risk, Hidden costs and benefits through changes in flexibility, and benefits from vendor expertise.

Finally, within the context of uncertainty, the practice of benchmarking will be discussed and this thesis will argue that while benchmarking is a useful tool, it should be used with moderation.

In addition to the companies, that have helped in this research, namely Gartner, IDC, Forrester, Yankee Group, The CGI Group, and McKinsey and Company, by providing reports and accepting to answer questions, I would like to thank Joe Saliba from the CGI Group and Vivek Pandit from McKinsey and Company for sharing with me their insights about the outsourcing world, and providing great support for the research.

2. The Outsourcing and Offshoring Competitive Landscape

This section will describe the current state of the outsourcing landscape by dividing the different players into categories, and analyzing the incentives of each category, and the trends that are shaping the industry today.

The analysis will first focus on the vendors, or external service providers (ESP's). The vendors will be divided in to two major categories: Onshore and Offshore. In this paper, onshore will mainly refer to American firms, while offshore will mainly refer to Indian firms.

After that, the analysis will turn to the customers, or Service Recipients (SR's). The SR segment will be broken down into categories that reflect the level of involvement on outsourcing and offshoring. The different categories will have different concerns, as well as different plans concerning outsourcing, and different governance structures. All these aspects will be part of the analysis.

2.1 The Vendors

This part of the paper will discuss the different categories of vendors or ESP's, and their concerns. First, the difference between offshore providers and onshore providers will be discussed. After that, the difference between low-end and high-end services will be explained. These two aspects, discussed in parts 2.1.1 and 2.1.2, will serve as a description of the different types of outsourcing providers.

Parts 2.1.3 and 2.1.4, will discuss more general trends that concern all types of ESP's. The first is the increasing demand for Business Process Outsourcing (BPO) in

addition to the regular Information Technology (IT) Outsourcing. The second trend that will be discussed is a phenomenon that is being observed in which American and Indian Outsourcing vendors are converging to becoming the same kind of company, with a global presence and a global delivery model.

2.1.1 Offshore vs. Onshore

The first distinction that can be made between outsourcing providers is the location where they execute the work. Typically, they are divided into three categories:

- *On-shore*
- *Near-shore*
- *Off-shore*

Of course, the three terms are relative to where the customer is located, and near-shore for example, will have a different meaning in Europe than it would have in the United States.

On-shore outsourcing refers to when the outsourcer implements the work in the same country as the customer who is receiving it. In this case, the work can either be done on-site (at the client site) or off-site (at the provider's site).

There are clear advantages to having the work done on-shore, and even on-site. Here are some of the advantages:

- ***Same Culture:*** Communication is very important in order to have a smooth process running between the outsourcer and the client. Having the same language, culture, etc... can reduce risks of misunderstandings and increase efficiency through proper communication.

- ***Same Time Zone:*** Another important advantage of working in the same country is that the workers on both sites have work shifts that overlap, which is not the case in off-shoring. When workers in the US are working, people in India are sleeping and vice-versa (which can sometimes be turned into an advantage as will be discussed later).
- ***Ease of Reach:*** It can be very helpful to have proximity so workers can go to the client site when needed.

Near-Shore refers to when the outsourcer implements the work in a neighboring country. In the case of the United States, Near-shore typically refers to Canada or Mexico.

The advantages of near-shore outsourcing are not very different from the advantages of on-shore outsourcing, especially when the neighboring countries are as similar as the United States and Canada. In addition, the neighboring country usually has lower labor costs.

Off-shore outsourcing refers to when the outsourcer implements the work in a country distant from the client's location. Many offshore outsourcing centers are emerging, Ireland, Poland, Israel, India, China, the Philippines and others.

Offshore outsourcing from the US to India has received a great amount of media attention recently because it has been growing extremely fast, and many people perceive it has a threat to employment in the United States. This paper will not attempt to take a stance on the controversy. However, offshoring is a reality of the market, and one that will be addressed neutrally.

The reason why offshoring to India has grown so significantly in the past years, is that India can provide a tremendous amount of qualified workers at wages that are a fraction that of their American counterparts.

Many different functions have already been outsourced to India, from application development, to call centers. Recently, even prayers have been outsourced to India when American priests found themselves unable to cope with the demand for prayers.

On-shore, near-shore and off-shore have very different costs and benefits and where to outsource the work really needs to be tailored to each customer. In many cases, the same project is broken up into separate segments which are each performed in the most appropriate location. This is called the global delivery model, or global sourcing. Global sourcing management is becoming an increasingly important skill for companies to stay competitive.

2.1.2 Low-End vs. High-End Services

Although outsourcing as a single concept has received a lot of attention lately, due to the migration of white-collar jobs offshore, and because of the fact that 2004 was an election year, it must be noted that there is a wide range of services that can be outsourced. Some services require a significantly higher level of expertise in specific fields or industries, and provide much more value to the customer than other services which are more easily automated.

Initially, the functions that were outsourced, and particularly off-shored, were the functions that were the easiest to describe and automate, such as data entry. More complex functions either remained in-house, or on-shore. However, as offshore suppliers

have been gaining credibility by delivering results comparable to their American counterparts, American firms have begun to offshore functions with higher and higher value.

Today, Indian and American firms are still in a different competitive position regarding the type of services they provide. Indian ESP's still have an edge over American ESP's with lower-value services because they are able to better leverage the labor cost savings that India has to offer. On the other hand, American ESP's are much better established as high-value service providers.

Consulting and systems integration are examples of higher-value services which are typically performed by US ESP's that have a more solid client base at home.

Application development and maintenance, and data processing are examples of lower-value services for which Indian ESP's are well positioned, and are being recognized as low-cost high-quality competitors.

As we will see in section d, both sets of players are trying to capture the advantages that are currently out of reach to them: Indian ESP's are trying to build up their credibility in higher-value services and establish a solid presence in that sector in the US.

Similarly, American ESP's are rushing to India to try to gain the type of labor cost savings that will allow them to be competitive in lower-value services.

This has led to a series of strategic movements, resulting in a convergence phenomenon in which, the profile of both sets of players look more and more similar.

2.1.3 From IT to BPO

Originally, offshore outsourcing was focused on labor cost savings, and the services that were sent offshore were the low-value IT services discussed previously. Gradually, Indian ESP's have established themselves as providers of good quality work, and their credibility has been well established.

With the help of their new status, Indian ESP's have been trying to climb up the IT value stack and provide services that deliver higher value to the customer such as consulting and systems integration.

In parallel, ESP's (both Indian and American) have been trying to deliver high-value services by expanding their portfolio of services offered beyond IT into business process outsourcing or BPO.

Demand for BPO has been growing tremendously as companies have become aware that with time, savings from BPO will eventually surpass savings from IT outsourcing. This is especially true because the functions that can be outsourced through BPO represent a larger portion of companies' budget than the ones that can be outsourced through IT outsourcing.

According to Forrester Research, savings from offshore BPO, will be 4 to 5 times greater than savings from offshore IT outsourcing. According to the report, however, BPO savings become fully visible at a later stage than savings from regular IT outsourcing.

The report from Forrester argues that companies need to build up their offshore project management skills, and go through several phases of offshore migration before reaping the full potential of offshore outsourcing.

The report predicts that typical offshore savings from IT as a percentage of revenue will gradually increase from 0 to about 0.75% after 10 years, whereas the numbers for BPO have a more exponential growth, reaching 1% after 6 years, then 3 % after 10 years. Both curves reach a plateau after 10 years.

As we will see in the next section about customers or SR's, once the company has seen the benefits, and is committed to going offshore, (about 3 years after the initial offshore decision), BPO starts becoming a priority in addition to IT outsourcing.

Other reports in the literature point to similar benefits from BPO, and the demand on the customer side has become so large that it has become a priority for providers to address it.

2.1.4 The Convergence Phenomenon

The initial gap between Indian ESP's and American ESP's is slowly becoming more and more narrow. The portfolio of services offered, as well as the locations where the work can be implemented is increasingly similar for both sets of ESP's. In this paper, this will be referred to as the convergence phenomenon.

The two previous sections have described the patterns that are the main reasons for the convergence phenomenon:

- Motion along the IT value spectrum: Indian ESP's are trying to capture a bigger share of the high-value IT services market, while American ESP's are trying to better capture the potential savings from offshoring.
- Transition from IT to BPO: After companies have seen the benefits from outsourcing their IT functions, they begin demanding BPO services.

Both patterns are results of the increasing pressure on ESP's to go beyond cost savings and start increasing the value of the services they provide.

Each set of ESP's is facing a series of obstacles on their way to their new objectives. The situation of each set is discussed in more detail in the following paragraphs.

Indian ESP's climbing up the IT value-stack:

Leading ESP's in India are attempting to provide customers with a broader portfolio of services, such as consulting and systems integration. To do so, they are building or acquiring value capabilities and building onshore development centers in the US.

For example, Wipro Technologies (a leading Indian ESP) has recently acquired NerveWire, an American consultancy.

The main challenge facing Indian ESP's will be to build a solid foundation *onshore*, and increase their credibility in high-value services in order to attract American clients directly.

US ESP's going offshore:

When deciding to go offshore, American ESP's need to decide whether they will build their own offshore development centers and grow "organically", or whether they will acquire an existing offshore provider.

The first option, setting up a proprietary offshore development center, presents high barriers:

- The cost of attracting top Indian workers from existing Indian ESP's can be very high, reducing the cost savings that were originally expected.
- Significant upfront investments are required. These investments are not always capital investment, but planning the move offshore can mobilize very valuable staff resources, which is very costly.

The second option, acquisition, is a faster solution to establishing an offshore presence, but poses its own challenges, like the proper integration of two different cultures and processes.

US providers also have the possibilities of joint-ventures and alliances with established offshore providers. Some providers such as Perot Systems have chosen this path, which poses its own challenges, however these will not be discussed here.

All ESP's focusing on BPO:

In addition to cutting cost, outsourcing and offshoring is now being pressured to deliver higher value. This means that providers need to start gaining industry-specific expertise that could allow them to be proactive on client accounts, and suggest solutions that will really enhance the value that customers get from the outsourcing deal.

2.2 The Clients

This section will describe the different categories of customers or SR's. In order to clearly understand the current concerns and aspirations of different types of outsourcing clients, this section will begin by describing the motivations that are at the root of outsourcing in general, and offshoring in particular.

After that, parts 2.2.2 and 2.2.3 will discuss the different levels of offshore commitment, as well as the corresponding governance structures that are required in order for a company to achieve the maximum cost savings.

Part 2.2.4 will discuss the increasing importance to BPO in addition to regular IT outsourcing.

2.2.1 Motivations for Outsourcing

There are several motivations for outsourcing in general and for offshoring in particular. Depending on the particular state of a company's function (IT, Payroll, or other...), the management might want to outsource the function to another company to reduce cost, improve quality, add an element of flexibility, to get more expertise in a particular area, because it believes that the provider will remain up to date, or for many other possible reasons. Let us examine some of the most important reasons in more detail.

The primary driver of outsourcing in most cases is the reduction of cost. Of course, clients usually assume that the quality of the work provided will be as good if not better than "in house", and given that assumption, they believe that outsourcing a

function, or even a whole department, can reduce the cost without being detrimental to quality.

The importance of cost savings in outsourcing in general can not be overstated. For a long time now, companies have been subcontracting functions that are not core to their business to other companies that can do the work better and cheaper. This is not a new phenomenon, although the recent importance that is being given to the subject might mislead the public to believe that it is.

What is new however is the migration of higher end – white-collar – jobs from the United States to India. This migration is a subset of Outsourcing, called Offshoring. The distinction is very important. There is a consensus that outsourcing onshore is an important factor in the productivity of the American economy. It means that every dollar is better spent than it would be “in-house”. Offshoring on the other hand is much more controversial, since the productivity and efficiency gains sometimes come at the detriment of US jobs.

This paper will not attempt to argue for or against political decisions regarding the subject of offshoring. It was important however to make the distinction in this context, because low labor costs is unarguably the major driver of offshore outsourcing.

When trying to estimate the percentage of cost savings that can be achieved through outsourcing (onshore or offshore) one finds that the data is very difficult to obtain, and even harder to synthesize. We will discuss these aspects in greater length in the next section.

In addition to cost, companies often decide to outsource to improve the quality of the work performed, which can be illustrated by key metrics that are determined in the

agreement. For example, the downtime of a network can be used as a performance metric. In this case, the ESP is capable of providing less downtime on average for an equal or lower cost. Many other performance metrics can be used depending on the type of work being outsourced.

Although cost and quality are the most obvious reasons that might lead a company to outsource one or more of its functions, there are several more subtle aspects of outsourcing that can serve as incentives. One important aspect is the ability of the ESP to always upgrade its technology to the latest available. Due to the size of the ESP, this might be something that is simply not possible to do “in house”. Clients might also be interested in flexibility with respect to the size of the engagement. ESP’s provide services that adjust to the business of their client, which means that the contract increases or decreases according to the needs of the client. This is also a consequence of the size of the ESP and the fact that the ESP has many clients, so staff can be reassigned efficiently, whereas client companies can not as easily hire and fire in parallel to the fluctuations of their business.

The last incentive for offshore which is relevant to this paper is that in many cases, it allows the work to continue for 24 hours a day. There already exist many examples of this today, although probably not nearly as much as there will be in the future. Some examples include:

- ***Software Engineering:*** When American Programmers go home at night, the code is transferred to India where it is tested overnight and ready to be used the next morning by the American software engineer.

- **Radiology:** American Radiologists can take X-Rays in US Hospitals, and digitally send the images to India where they are analyzed overnight by Indian radiologists. The results of the analysis are sent back and ready to be used the next morning in the US.
- **Consulting:** Some consulting companies prepare material for a presentation, and send it to India where it is finalized overnight. This includes PowerPoint slides, and other presentation tools.

The examples mentioned above show that significant use can be made of the time difference.

All the incentives we have mentioned have fueled the latest hype about outsourcing, and there is no reason to believe outsourcing will slow down in the future. On the contrary, as companies become more and more experienced with the process, it seems inevitable that global sourcing will be an extremely important strategic tool for success, and one that will receive increasing attention.

2.2.2 Different Levels of Commitment to Offshore

There exists a whole spectrum of commitment to offshore outsourcing. On one end of the spectrum are companies that have started one or two pilot projects offshore and are skeptical about the results. On the other end are companies that are experienced with the process of performing tasks offshore, and offshore outsourcing has become a crucial part of their overall sourcing strategy. We will define three levels of commitment, and analyze the challenges, needs and aspirations of each category. Although there is no

clear limit between one category and the next, this structured approach will provide a useful framework for understanding the different kinds of SR's, and how ESP's can position themselves to best attract new clients.

It is possible to divide SR's into three categories: Experimenters, Convinced, or Experienced. We will discuss each category separately in the following paragraphs.

Experimenters:

Experimenters are companies that are curious about the potential of offshore outsourcing, but do not have previous experience, and therefore their expectations are unclear. They are sending some basic projects offshore in order to capture some of the savings that are possible due to low labor costs, but offshoring has not yet evolved into an important part of their sourcing strategy.

Usually, experimenters have one or more independent pilot projects that have been sent offshore, in a rather haphazard manner. Management teams are not convinced that the results will be satisfactory, and are still curious about the actual cost reduction that will be achieved.

Convinced:

We use the term convinced outsourcers to describe those companies which have passed the stage of pilot projects, were satisfied with the results and have decided to start organizing the transition offshore in a more centralized manner.

Experienced:

We use the term experienced outsourcers to refer to companies which have adopted offshore outsourcing or insourcing as an integral part of their sourcing strategies. These companies are well established offshore, with an efficient management structure.

These are the companies that are looking for creative pricing models, and relationship frameworks. Today, they make extensive use of benchmarks, as well as penalties as contractual tools.

2.2.3 Different Governance Levels for Offshore

Different levels of offshore commitment require appropriate management structures to deal with the distinct challenges that arise. The most successful offshore initiatives are usually the ones that were able to scale up the governance structure adequately, in parallel to the commitment level. In this section, we will analyze some of the ways in which governance can evolve successfully.

We will look at several important aspects of governance evolution:

- *Strategy*
- *Portfolio of vendors*
- *Processes*

Let us first discuss strategy. As offshore governance matures, the management team's strategic concerns will evolve. Initially, the goal is to clearly define a short to medium term offshore plan. The initial driver of off-shoring is mainly the reduction of labor cost, and the plan is designed with that mindset.

The use of offshore resources is initially limited, but as time passes, becomes broader and more consistent. Eventually, when the company has built an experienced offshore staff and governance structure, offshoring becomes an integral part of the company's global strategy, and the main strategic focus of the offshore management team becomes the search for innovative offshore models that can differentiate the company at the cost level and make it more competitive.

Another essential component that evolves with governance maturity is the company's portfolio of vendors. At the beginning of the offshore effort, many different projects are created with separate vendors, and are relatively uncoordinated. Over time, the need for a more coordinated approach is felt, and one single offshore management entity is formed.

From there on, the relationship between the company and the offshore vendors becomes an important component to obtaining the best performance and savings. After the offshore team is created, usually the number of vendors is reduced to one, two, or three preferred vendors. This is important because as projects increase in size and scope, and become more specific to the SR's core functions, the vendor needs to build up its vertical expertise of the SR's industry in order to be proactive in the agreements.

Finally, the last component of governance evolution that will be discussed in this paper is processes evolution. In addition to labor costs savings, adapting business processes can yield great reductions in cost. Initially, the companies often have processes that are poorly defined, and the first step into outsourcing or offshoring is to form a deep understanding of internal processes. From there on, the transition from onshore to

offshore can be accomplished gradually by transferring the processes, and then improving them and constantly optimizing.

2.3 From IT to BPO

As was mentioned previously, the outsourcing community has become aware that business process outsourcing (BPO) can yield returns on investment (ROI) and cost savings that are even higher than IT outsourcing. According to the report *Unlocking the Savings in Offshore* by Forrester, “The savings as a percentage of company revenue from [second generation offshore services like call centers and transaction processing] will be 4 to 5 times those from IT”.

Other reports from McKinsey and IDC agree: BPO is very important, and will provide SR's with a significant reduction in cost, if well implemented of course.

This realization has created a great demand for offshore BPO, and one that vendors are beginning to address.

3. Uncertainty and Expectations

Uncertainty plays an important role in today's outsourcing community, and the different aspects under which it can be found often have a profound impact on the results of outsourcing agreements.

The first aspect is market research uncertainty: when first considering and negotiating an outsourcing agreement, clients often rely on market research to initially formulate their expectations about ESP's and outsourcing. This will be discussed in section 3.1.

The second aspect stems from the fact that outsourcing sometimes has unforeseen consequences. These include but are not limited to hidden costs due to loss of flexibility, or loss of intellectual property. These issues will be studied in Section 3.2.

3.1 Elusive Information

Although outsourcing has received a significant amount of attention recently, in the corporate world as well as in the research community (from consulting companies to academic institutions), information on the subject remains anecdotal, and companies and governments alike diverge in their opinions regarding many aspect of outsourcing and offshoring.

This section will describe the outsourcing information landscape and argue that more research and documentation is needed in order for expectations to become better aligned with the reality of the market, thus making the practice more efficient.

We will begin with a literature review, in which several influential reports will be discussed. In addition to highlighting the most important findings of these reports, the review will serve to illustrate the uncertainty that persists today around outsourcing.

Literature Review:

In this section, four reports, each from a different market research company, will be presented. The reports have been chosen according to the following criteria:

- ***Influence:*** The reports chosen have received a significant amount of press coverage, have been widely read and have helped shape people's understanding of outsourcing and offshoring. They are therefore considered influential reports.
- ***Relevance:*** In the outsourcing literature today, information is very scattered, with a multitude of reports addressing different aspects of outsourcing with more or less accuracy and depth. The reports present results that will be relevant to this research.
- ***Author Availability:*** For each report, I have been in contact with the author or co-author either through a formal interview or by attending a seminar in which the author presented his/her results.

Following every report will be a set of comments about the insights that were shared by the authors during the interviews, about the actual results in the report, and about comparisons with other reports.

Report #1: Offshoring: Is It a Win-Win Game?

Publisher: McKinsey Global Institute

Author(s): Diana Farrell

Date: August 2003

1. From the Report:

“The prime motivation for offshoring is that it reduces cost.”

“The equivalent of a software developer who costs \$60 an hour in the U.S. costs only \$6 an hour in India.”

“Workers in low-wage countries often have higher motivation and outperform their counterparts in developed countries in terms of performance measures such as the number of transactions per agent, or the number of errors per transaction.”

“Once [telecommunications and management] costs are taken into account, there is at least 45 to 55 percent savings in the cost base. Reengineering the process design can further increase this potential savings to 65 to 70 percent of initial costs”.

“Of the full \$1.45 to \$1.47 of value created globally from offshoring \$1.00 of U.S. labor costs, the U.S. captures \$1.12 to \$1.14, while the receiving country captures, on average, just 33 cents.”

The report argues that outsourcing should not be prevented because both countries benefit from the relocation of labor. The people who lose are the ones whose jobs have been displaced. McKinsey suggests that boosting training programs to enhance reemployment and sweetening severance packages can help make the transition easier. In addition, employment insurance can be setup, which compensates displaced workers during their transition period.

2. Comments:

I have interviewed one of the main contributors to the research that is presented in this report, Mr. Vivek Pandit, and pointed out to him that the 70% cost savings that are mentioned in the report seemed a bit optimistic, given that all the numbers that I have found in other reports point to lower cost savings, especially after the added cost of offshore management is taken into account.

The answer was that the numbers in the report describe the best case scenario, and not an average of the industry. 65 to 70 % cost savings are figures that come from specific cases, where off-shore outsourcing was very successful.

Given that the report presents mostly a macroeconomics level discussion of offshoring, it is understandable that the authors were more interested in describing the maximum potential savings from offshoring rather than the savings that can be expected on average.

Reading this, however, can have a misleading influence on potential clients looking to join the growing community of offshoring clients. Different reports on outsourcing and offshoring will present different numbers, and it can be difficult for newcomers in the outsourcing milieu to reconcile the different points of view in a coherent manner, and have expectations aligned with the reality of the market.

Report #2: Application Development Sourcing Cost Model

Publisher: Gartner, Inc.

Author(s): J. Feiman, A. Apfel

Date: 29 December 2003

1. From the Report:

In this report, Gartner presents a model to be used by companies when deciding on the following:

- *Should the enterprise use its own staff or the staff of an ESP?*
- *Should the staff be located on-site, off-site, or offshore?*

The model uses several parameters, all of which need to be quantified, including: Effectiveness, Communication, and of course Billing Rate.

The Communication Factor is composed of several parameters:

- *Language parameters.*
- *Collaboration parameters.*

The Effectiveness Factor is composed of several parameters:

- *Technology expertise*
- *Project management expertise*
- *Business-domain expertise*

Each of these parameters has its own subparameters.

According to the model, American ESP's can potentially provide cost savings in the same range as Indian ESP's, that is in the 35 – 40 % range, even though their billing rates are higher, by having superior effectiveness and communications factors.

2. Comments:

The model, while presenting a rigorous approach to decision making regarding outsourcing and offshoring, does not take into account factors that are harder to quantify, such as hidden costs and hidden benefits.

Hidden costs can be anything from risks on intellectual property, to loss of flexibility.

An example of hidden benefits comes from Forrester: The application of the vendors CMM level has helped the client company identify processes that were not efficient and improve them.

Gartner's report is unique in the sense that it provides a systematic way of making decisions regarding Application Development (AD) sourcing. The results derived from the model can provide a good starting point, however one must take into account a much broader set of factors before making a final decision on the matter. (The report states some of its own limitations)

Another problem with models in general, and this one in particular, is that many parameters can not be quantified accurately, which means that there is a limit to how significant the results of the model will be. For example, it is obvious that assigning a communication parameter to a particular company is problematic, regardless how detailed the model is.

For this research, I have interviewed J. Feiman, and asked whether he believes that American ESP's do actually provide savings that are in the same range as the Indian ESP's due to their effectiveness. The answer was that potentially, it was feasible, but that in reality, American ESP's do not properly compensate for their high billing rate. A

typical American ESP can provide savings in the 17 – 19 % range, whereas a typical Indian ESP will actually provide savings in the 35 - 40 % range.

Report #3: IDC's ASP Average Cost Savings

Publisher: IDC

Author(s): Jessica Goepfert, Amy Mizoras

Date: 29 January 2003

Note: ASP means Application Service Provider, which is a specific kind of outsourcing vendor.

1. From the Report:

“ASP customers receive an average ROI of 404%.”

“Cost Savings = (cost of continuing to run applications in-house – cost of ASP service) / cost of continuing to run applications in-house”

“The average initial cost savings [from ASP implementations] was 16%, and the average total cost savings [over a five-year period] was 19%. The range for initial cost savings was 0-91%, and the range was 0-94% for total cost savings.”

“Although IDC recognizes the importance of being able to prove business benefit using a variety of measures, we contend that going down the path of cost savings is risky and will only lead to further spreadsheet wars and erosion of margins.”

2. Comments:

For this report, the analyst who was interviewed was Mrs. Amy Mizoras Konary, who is a co-author of the report.

An important point that was clarified is that the 19% cost savings is not a per annum figure, as one could have been expected. This means that according to the report,

once the initial cost savings of 16% are achieved on the first year, there is only an improvement of 3% over the next four years. Of course, this is only an analysis of ASP implementations. When other functions are outsourced, the cost savings have a different structure.

Mrs. Konary said that there were 52 companies interviewed, whose sizes varied from 12 to 20000 employees. The average revenue of the companies exceeded \$1 Billion.

When asked what readers should take away from this report, our interviewee answered that cost savings are not the only metric of importance. A previous report by IDC suggests that ROI from ASP implementations are 404% on average, which makes the idea of ASP's more attractive.

The reason why ROI's are so high even though cost savings are not nearly as impressive is that there are many factors that are taken into account for ROI calculations, but are not taken into account when calculating cost savings. Some of them are mentioned in the report:

- *Productivity Gains (employees becoming more efficient)*
- *Redeployment of non-IT staff*
- *Business-process enhancements.*

According to Mrs. Konary, the last factor is the most important, and is the main reason why ROI's can be so high even though the actual cost savings are not. This is why companies should not only focus on simple cost savings, but also look into how ASP implementations can enhance their business processes.

Note that this can be compared to findings in the McKinsey report, which suggests that business-process reengineering should always go together with outsourcing, because

it can further increase the benefits. McKinsey's argument is that business processes in the US are adjusted to labor costs onshore. When a task is performed offshore, firms can reap additional benefits by redesigning their processes to be more labor-intensive (as opposed to heavily automated), in order to maximally leverage offshore labor costs.

Another important aspect of this report is the very large variance that characterizes its results. Although the averages are 16% and 19% respectively for initial cost savings and total cost savings, "the range for initial cost savings was 0-91%, and the range was 0-94% for total cost savings".

This type of variance is typical of all information currently available on outsourcing, and illustrates how difficult it is to accurately benchmark the financial outcome of outsourcing deals. This topic will be discussed further in section 3.2.

Report #4: Unlocking the Savings in Offshore

Publisher: Forrester Research, Inc.

Author(s): John McCarthy

Date: February 2003

1. From the Report:

"Offshore firms rate higher in quality than their US counterparts"

"US firms' lack of project management skills hinders their offshore initiatives."

"A number of firms also saw second-order benefits from the process discipline of the third parties"

“The biggest issues for interviewees using offshore firms revolved around areas like project management and defining accurate performance metrics for managing the remote vendor.”

According to the report, there are two additional waves of savings beyond the reduction of labor costs:

- ***Application of the vendor’s CMM expertise.*** These savings can be 15% to 20% of the initial contract depending on its size.
- ***Significant BPO benefits.*** Once companies are able to fully leverage their offshore resources for the purposes of BPO, the savings from BPO as a percentage of company revenue will be 4 to 5 times those from IT.

2. Comments:

For this report, I have attended a seminar at MIT in which the author, John McCarthy presented his results in a lecture on offshore outsourcing.

In his lecture, Mr. McCarthy focused on the importance of scaling up governance efforts to appropriately meet the challenges of increasing offshore presence.

This report also serves to illustrate again the idea that IT outsourcing is only the beginning, and that business processes are extremely important. In this case, Forrester argues that savings from BPO will eventually exceed savings from IT outsourcing by a factor of 4 to 5.

The previous report by IDC also highlighted the importance of business process enhancement which leads to benefits that are part of the ROI calculations, but are not visible when calculating cost savings.

In both cases, customers have to learn to look beyond simple cost savings from IT and take into consideration the effects that outsourcing will have on business processes.

3.2 The Difficulty of Forming Realistic Expectations

The sample reports from the previous section show that different analysts approach the problem differently, and from different angles. Although many findings are qualitatively similar, such as the importance of business processes, results involving numbers are a much trickier problem.

Different reports have looked at different numbers, and the significance of the numbers themselves is not properly understood. Results from one company can not be compared to results from another company because most of the time, the research does not really overlap, when it comes to numbers.

IDC for example, puts forward some numbers regarding cost savings in ASP implementations. (These results are discussed in the literature review.)

The first issue with those numbers is the very large variance that accompanies them, which implies that the average is not very significant when looking at individual cases. Should a potential outsourcer actually expect 16% initial cost savings, or is it more likely to be one of the extremes (0%, or 91%)?

The second issue is the significance of those numbers. How significant are the average cost savings, when ROI's are expected to be in the 400% range? Which financial metric is more relevant?

Why are there so many questions that are not resolved in the literature? The reason is not that these market research companies are not accurate enough. The reason is that outsourcing deals are inherently very different from one another, because there are so many parameters involved, and so many different types of projects that have very different cost structures.

Averages such as the ones provided by IDC are a good first step to get an idea of the market, but much more research is needed on the individual cases in order to decide whether outsourcing is the right decision.

The next sections describe other sources of uncertainty that need to be carefully studied in order to make an informed outsourcing decision.

3.3 Hidden Costs and Benefits

When considering an outsourcing option, there are many costs and benefits (some of which have been discussed) that can be quantified with more or less accuracy. There are several other costs and benefits which are trickier to quantify but that must not be forgotten. Here are three of them:

Intellectual Property:

It is not known clearly how much IP can or will be lost through the outsourcing deal, especially when off-shoring work to countries without solid IP Protection. In manufacturing this has been an enormous issue. Every outside car manufacturer in China has some local producer making exact replicas of one of their local models.

Loss of flexibility

After the initial transfer costs, there are additional costs that will be incurred:

- It may be much more costly to change processes after they are outsourced
- An outsourcing vendor may be less responsive to demands for change than an in-house IT department since they have many customers. Maybe only the largest clients will have much influence on the vendor.

Benefit from Vendor Expertise

One example of such benefit is the application of the vendor's CMM expertise. This can yield cost savings that are added to the savings from labor costs. There are other examples which depend on the type of function being outsourced.

3.4 Benchmarking Challenges

As we have seen, numbers are an evasive subject in outsourcing. For the same reasons, benchmarking in outsourcing can be very challenging.

Benchmarkers attempt to set expectations for the performance of outsourcing providers.

There is a growing trend of including more and more benchmarks in the contracts, and rewarding or penalizing the vendor depending on its performance relative to the benchmarks.

However, one can see that while the framework is valid and helps align the interests of the vendors and clients by providing monetary incentives, it contains a weakness that needs to be handled with care: the benchmarks themselves.

Benchmarking is very tricky, especially when analyzing the cost savings for an agreement as a whole. Here are a few of the challenges of benchmarking:

- Even two deals that look very similar might have different cost structures.
- If an application is outsourced as part of a larger outsourcing deal, the savings can be higher.
- The structure of IT government (centralized vs. federalized) plays a role in the final cost savings
- The drivers of cost need to be taken into account (ex: MIPs, downtime, recovery time...)
- First-Time vs. Experienced Outsourcers will get different results.
- Sometimes, the original cost structure is not even well understood, so the actual cost savings will be different from the calculated cost savings.

Benchmark reports do not take into account the complexity of the environment. For example when there is a bid for one service, the benchmark will not take into account the fact that the service is only one part of a complicated system, and the complexity will drive up the cost.

Benchmarks are a very useful tool, but clients need to remain flexible in their negotiations, and be ready to accept numbers that are not in the reports. Deals should also be profitable to the vendor. Too much pressure on their margins can only lead to mutual dissatisfaction.

4. Contributions

The contributions of this thesis can be divided into two categories. The first is to have synthesized a coherent and up to date overview of the outsourcing and offshoring competitive landscape. In this overview, vendors and customers were discussed and the latest trends of the market were presented. One important phenomenon that is being observed is the increasing importance of Business Process Outsourcing (BPO). Another important trend is what was referred to here as the convergence phenomenon, during which U.S. providers are rushing to India to take advantage of the labor cost savings, while Indian providers are attempting to establish a firm presence in the U.S. with the aim of capturing a part of the high-value IT services market onshore.

To produce the overview, over a hundred reports were identified and analyzed, interviews were conducted with authors of reports, senior consultants, university professors, and outsourcing executives.

The second part of this thesis has focused on the different aspects of uncertainty in the outsourcing world today. The first such aspect is visible in the outsourcing literature today, in which reports are very chaotic in their approach to the subject, and the numbers that are brought forth are not reliable due to the very large variance in the statistics.

Other important aspects of uncertainty in outsourcing are the hidden flexibility costs and benefits (which arise from the gain or loss of flexibility in the work after the outsourcing deal), the risk of intellectual property loss, and the uncertainty surrounding the practice of benchmarking.

Realizing this is important because potential clients need to understand that IT outsourcing and BPO are not utilities, which means that their expectations need to be flexible, especially in the first phases of an outsourcing project.

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