



Total Cost of Engagement

The unique value of Near Shore as an enabler for lower cost of offshore outsourcing

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Executive Summary

The whole concept of Offshore Outsourcing is created around the idea that cost efficiencies can be attained by shifting work from a high cost to lower cost locations.

Although it is a fact that man/hour rates are a fundamental driver to reduce costs, offshore savings should not be determined only by the man/hour rate differentials. A holistic view of expenditure measurement should be considered. TCE or Total Cost of Engagement is an approach that evaluates the total expenditures of offshore engagements.

Despite the maturity level reached by the offshore outsourcing programs in many Fortune 500 corporations, the model cannot be leveraged at its full potential. There is still an important amount of work that is done at the client's site, thus increasing the TCE. The reason is the fact that time-zone differences and distance with India, and other Asian outsourcing destinations is a barrier.

Although Near Shore rates tend to be higher, the overall cost of Near Shore engagements is equivalent or less than offshore, because of the efficiency gains that working in close proximity to the US and in the same time zones can bring. The Near Shore model is much more efficient in achieving higher percentages of work performed at a lower cost location than offshore.

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1. What is Total Cost of Engagement (TCE)?

A few years ago, IT industry analysts introduced the concept of TCO (Total Cost of Ownership) to measure the overall expenditure associated with a certain solution.

The TCO approach has helped IT and business managers evaluate solutions with a rational model that encompasses all the costs related to a certain solution.

For instance, a TCO model for a corporate e-mail solution includes not just the license and annual fees for the e-mail software, but also considers the direct cost of the hardware for servers and clients, IT staff training, end user training, and external services fees. Furthermore, the TCO model also considers the costs related to productivity losses or gains associated with ease of use, performance and reliability, and could even embrace possible costs associated with vendor risk and viability. Under this model, license cost, while important, becomes just another piece of the puzzle.

The same way TCO provides a holistic view of expenditure measurement, proving that software solution cost goes beyond licensing fees. TCE is an approach that should be considered to evaluate the total expenditures for offshore engagements; these costs go beyond project team costs (man/hour rate times project effort).

Considering the maturity level of off-shore vendors today as well as the Near Shore model, it is imperative to broaden the evaluation criteria for Offshore services beyond project team costs and man/hour rates.

2. It's all about Offsite Leverage

The whole concept of Offshore Outsourcing is created on the idea that cost efficiencies can be attained by shifting work from a high cost geography to a lower cost location. Professional services man/hour rates are lower in Mexico, India or China, than those in US, UK or Japan.

Despite the maturity level reached by the offshore outsourcing programs in many Fortune 500 corporations, the model cannot be leveraged at its full potential; there is still an important amount of work that is done at the client's site, thus increasing the TCE. The reason for that is the fact that time-zone differences and distance with India, and other Asian outsourcing destinations is a barrier.

The percentage of work done at the offshore location is known as Offsite Leverage.

Typical Offsite Leverage for Asian vendors ranges between 60% and 65%, meaning that the remaining 40-35% of work remains at the client's site. Furthermore in some cases, vendors and clients agree to add an overhead in the headcount to their projects, to have people dedicated to minimize the impacts of distance and time-zone differences.

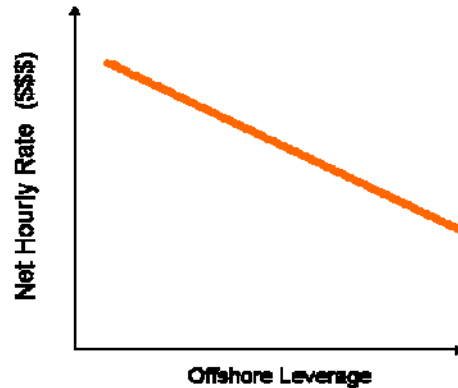
The Near Shore model is much more efficient in the Offsite Leverage metric. For US clients it is much more convenient and feasible to have more work performed in Mexico than in India. Time-zone differences are non-existent or minimal. Air travel is easy and frequent, travel times range from 1 to 5 hours. Communication infrastructure is similar, and so is the business culture.

The proximity component, inherent to the Near Shore Model, yields to an average Offsite Leverage of 80% or higher.

The higher the Offsite Leverage, the higher the savings.

The Offsite Leverage impacts directly in the blended rate that the client will be paying. The higher the leverage the vendor can have of its off-shore facility, the lower the blended rate. This blended rate is called TCE Net Hourly Rate and is the ultimate rate that the client will pay for every Man/Hour, it encompasses all the cost components of the engagement described below.

The direct relation between Offsite leverage and TCE Net Hourly rate is represented in the following graph:



3. Cost Components of the Engagement

Project Team Costs

The rate differential for IT services in the US and those of Off-Shore countries has certainly been the most appealing argument for off-shoring. Offshore man hour rates can represent only a fraction of the costs at hiring countries, primarily US, UK, Japan and Australia.

Project Team Costs which is calculated by multiplying the Man/Hour rate times the project effort, has a very important specific weight in the cost evaluation of a solution, but is by no means the only aspect that should be considered. TCE brings Project Team costs into a context where its relative weight will be determined in conjunction with all the aspects that have an effect on the off-shore engagement overall.

Use the following formula to calculate the Project Team Costs:

$$\text{Project Team Costs} = (\text{On-Site Man/Hours} * \text{On-Site Rate}) + (\text{Off-Shore Man/Hours} * \text{Off-Shore Rate})$$

Costs of Vendor’s Attrition

Every time a resource from the vendor resigns and leaves an engagement, there is a burden to the project, caused by loss of productivity and a cost of knowledge transfer to the replacement. This costs need to be considered as part of the TCE. To calculate these costs, two input values are needed; the annual attrition rate in percentage and the average time to have a productive replacement, with these values, the following formula can be used:

$$\text{Costs of Vendor’s Attrition} = \text{Attrition Rate (\%)} * \text{Number of Resources} * \text{Time to be productive} * \text{Rate}$$

Note: A good practice is to calculate separately the on-site attrition costs from the offshore attrition costs which tend to be much higher.

Project Overhead

Off Shore engagements tend to require people that is in charge of supervision and project oversight, minimizing the effects of distance and time zone differences inherent to an Off-Shore model. It’s a common practice of offshore vendors to have redundant project management roles, one at the client’s site and the other offshore, and in some cases clients have to allocate internal personnel. Thus increasing the cost in order to assure quality, on time delivery and avoid communication flaws. This is considered as a Project Overhead and should be considered within the TCE by using the following formula:

Project Overhead = (On-Site Man/Hours * On-Site Rate)+(Off-Shore Man/Hours * Off-Shore Rate)

Allocation Costs at Client Site

This is the amount charged back from the organization to the project or IT area per person working at the client's site. Generally includes power consumption, office supplies, office space, etc.

It is obtained by using the following formula:

Allocation Costs = On-Site Resources* Monthly Facility Use Cost per Resource* Number of Months

Telecommunication Costs

This concept encompasses data and voice communication expenditures. In some cases the highest portion of this cost is covered by the vendor, but there is always a client component in the data portion, and in every case there is a cost for long distance phone calls.

Data Communication Costs = Monthly Data Link Costs * Duration of the Engagement in Months

Long Distance Costs = Number of LD Minutes * LD Rate

Transition and Knowledge Transfer

Includes labor costs and travel expenditures needed for knowledge acquisition. In most cases, this is assumed to be a group of people from the vendor traveling to the client's site and spending as much time as needed to acquire the knowledge to carry-on the project. But a portion that is generally overlooked is the time that client resources allocate to train vendor's personnel, which can represent a heavy burden to the cost of the engagement.

KT Costs = (Vendor's resources on-site for KT * On-Site rate)+(Clients man/hours dedicated to KT * Clients man/Hour cost)

Project Trips

Most off-shore engagements require some sort of traveling, either from the client's side or the vendor's. The purpose of these trips can be project tracking and oversight, issue resolution or scope change, among several reasons. Beyond the evident travel & living costs, project trips cost should also consider the hourly costs of the resources that are traveling.

Project Trips Costs = Airfares + Hotel Fares + (man/hours spent in travel * hourly rate) + car rental fees + perdiem

Relationship Management Trips

This is another concept that involves traveling expenses, and allocation of client's personnel at the vendor's site. These relationship management trips are typically related to contract compliance monitoring, service level agreements oversight, etc.

Relationship Management Trips Costs = Airfares + Hotel Fares + (man/hours spent in travel * hourly rate) + car rental fees + perdiem

Engagement Staffing Costs

The costs incurred by the client in the process of selecting vendor's personnel for the engagement. This item refers only to the cost of man/hours invested in reviewing and interviewing candidates. The invested time may vary depending on the type of engagement, typically Time & Materials engagement will require a higher investment than those of Fixed Price.

Engagement Staffing Costs = Clients Man/Hours spent staffing * Client's Man/Hour cost

Additional Considerations

In addition to the Project Costs, hiring managers should also consider additional costs inherent to performing off-site projects. These costs are associated with possible losses in productivity due to distance and time zone differences, in addition to a monetary value for risk mitigation, which might be represented as a percentage of the Project Costs.

Total Cost of Engagement

Productivity Losses

A trade-off for cost efficiency in off-shore engagements may be loss in productivity. Since most part of the software project team is not at the client's site, and in most cases in a different time zone in a distant country, it is sane to assume that this factors can have an impact in the team productivity, as opposed as having the same team on-site. The best way to measure these productivity losses is as a percentage of the project cost.

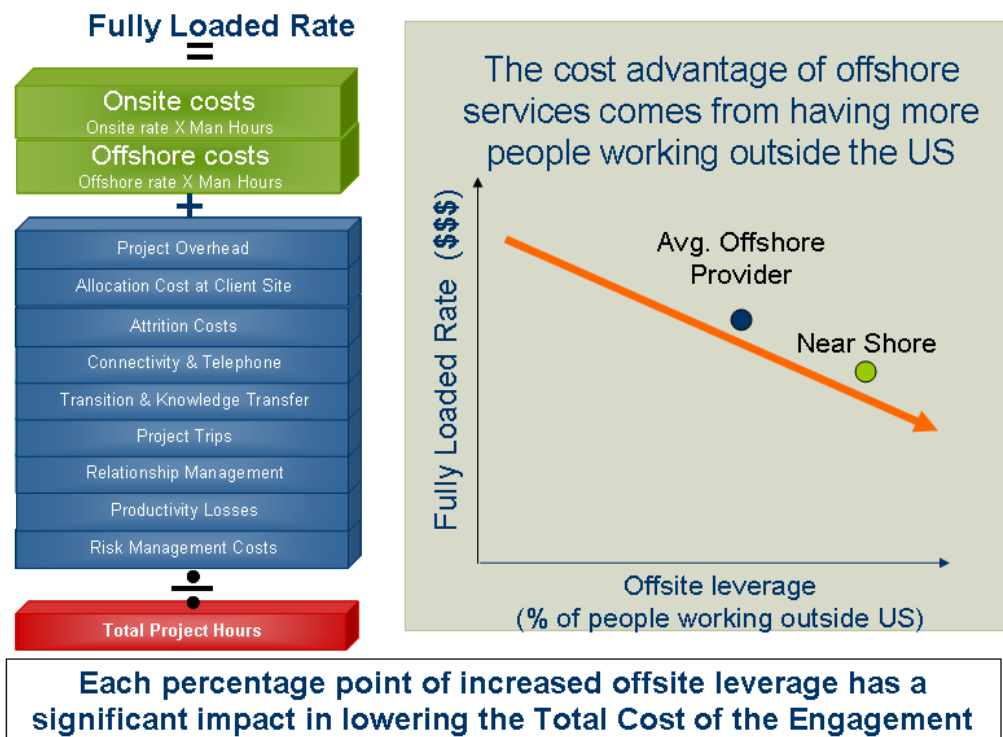
Risk

This is a monetary value for the effects that Geographical and Political aspects can have on the viability of the engagement. Risk factors include the following:

- Security Risks: Consider Information Security Standards, Vendor and Vendor's country track record
- Privacy Protection: Consider the availability of Data privacy laws and the enforcement of those laws. Also consider vendor's privacy protection policies.
- Government Interception Risks: Consider Foreign government capability to access and intercept records, as well as available regulations for record encryption controls
- Intellectual Property Risks: Consider patent laws, trade secrets and copyright enforcement in the Vendors country. As well as the sensibility of your engagement for Intellectual Property.
- Employee & Labor Laws: Consider labor laws and possible liabilities of your company in the vendor's country.
- Contractual and Legal Risks: Consider the availability of bilateral agreements between you country and the vendors. Take into account contract enforcement efforts.

These elements should have a monetary representation for the TCE. In some cases a direct monetary value can be allocated for an instace of the risk, in others, it is good to asume a percentage of the total cost of the engagement.

The complete picture of Total Cost of Engagement will include the following:



5. TCE – Softtek’s Near Shore® vs. Offshore

Man / Hour Rates

- While evaluating the difference of Man/Hour rates between Offshore, and Near Shore, managers should consider the two components of a typical off-shore engagement; the On-site rates and the Off-Shore / Near Shore rates.
- On-site rates tend to be very similar, because all Offshore vendors have to comply with US regulations, and pay its employees a competitive wage while working in the United States.
- It is a fact that cost-of-living in North American Near Shore countries (Mexico and Canada) is typically higher than traditional offshore countries. Therefore in some cases, Man/Hour rates tend to be 10-20% higher for the Near Shore component of the engagement than those of Offshore.

Travel Expenses

Consider the following travel expenses for a trip of 3 full days at vendor’s facility:

Concept	Monterrey, Mexico	Bangalore, India
Airfare (JFK, 2 week advance, economy class)	\$500	\$4,000
Hotel (Sheraton Hotel & Towers \$180 / night)	\$720 (No Jetlag)	\$900
Total travel time	4 days	8 days
Cost of human resources (assuming an \$80 /hour client cost and 8hrs per day)	\$640	\$1,280
Total Cost of Travel:	\$1,860	\$6,180

From a conservative point of view, travel expenses to an Indian Off-shore facility are 330% higher than those of a travel to Softtek’s Near Shore facility.

Telecommunication Costs

- In most cases, the offshore vendor provides data links, and the biggest expenditure is covered by the vendor. Nevertheless, there are some costs that should be considered, mainly in two areas: hardware infrastructure in the clients end (routers, firewalls, etc.) and Network Administration and Information Security personnel.
- Due to Business Continuity policies triggered by geo-political situations in central Asia, most companies buying offshore services from India had to install redundant data infrastructure, as part of their BCP, incurring in hardware and human resources costs.
- Long distance costs should also be considered. According to AT&T corporate rates (published in AT&T web site), India Long Distance costs are 310% higher than those for Mexico.

Consider a simple exercise for a 6 month engagement, where team members spend an average of 60 minutes a day in long distance phone calls, the comparison of LD expenditure is as follows:

Concept	Mexico	India
Per-Minute cost	19 cents	59 cents
6 month expenditure	\$1,368	\$ 4,248

Softtek’s Near Shore engagement would offer additional savings of up to \$2,880.

Engagement Management Overhead

- Distance and Time zone differences have a direct impact in the way an offshore engagement is managed. For an offshore engagement in India, people on-site (client’s

and vendor's personnel) have to accommodate odd schedules to have the necessary communication like conference calls.

The impact in the Total Cost of the Engagement of this item, is that in some cases the client has to pay overtime for it's employees or local vendors, and in some Time and Materials engagements, there are additional man/hour fees applied to this type of activities.

- Most telephone communications for offshore engagements have to be planned and agreed in advance, while Near Shore enables a more casual communication inherent to software projects. Onsite managers can pick-up the phone, and be certain that they will be able to talk with the Near Shore team any time of the work day, since Softtek's Near Shore Teams are working in the same time-zone.

Ease of communication has a direct impact on productivity, non-spontaneous communication has a negative impact in the cost of the engagement.

Higher Near Shore Leverage Drivers

Near Shore contributes to a higher Near Shore leverage from the very beginning of the engagement. Some examples that contribute to increase the leverage are the following:

- Trainer at the Near Shore Development Center Vs. all Team Onsite for training
- Full team Near Shore and fly as needed vs. having part of the team permanently onsite
- Two day review trips vs. one or two week when traveling to India
- \$450 usd average cost of round trip flight
- UPS / Fedex Next day delivery
- Same time zone, including daylight saving
- Temporary import/export of equipment
- Same work calendar: In some cases there are more than 20 combined holidays of the US and Asian offshore destinations

Geo-Political Risk

- Mexico is the second largest trading partner of the US, just behind Canada. Through this relationship, strong foundations have been created, like telecommunications, transportation, migration and legal.
- Mexico along with US and Canada are members of NAFTA (North America Free Trade Agreement) valid since 1992. This agreement has effect in Near Shore engagements in three ways:
 - Mexico is Business-Friendly and culturally attuned to American Business Practices
 - Regulatory and legal issues of cross-border business dealings are significantly less than those with countries not part of NAFTA.
 - Availability of visas is not an issue, due to the availability of several types of visas designed to facilitate exchange and transit as part of NAFTA

Attrition

- The fact that India based vendors have been growing so rapidly in the last few years, has created market dynamics where talented individuals are always offered with attractive opportunities. With so many large vendors concentrated in main India regions like Bangalore or Chennai, attrition levels have been raising in recent times.
- Near Shore promotes higher retention levels due to better communication between the onsite and offsite members of the team.

Notes: