



White Paper on Offshore Software Development in India

Part 1

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Last Modified: Sunday, October 05, 2003



Table of Contents

Introduction	3
What is Outsourcing?.....	3
What is an ODC?	4
Establishment of an ODC.....	4
A typical ODC Set-up	4
Dedicated Offshore Development Center	6
Risk Management	6
Levels of Risk	6
Types of Risk.....	7
Responses to Risk.....	8
Attrition issues.....	8
Cultural Integration.....	9
Indirect procurement	10
Benefits of Outsourcing.....	13
• Reduced Cost.....	13
• Quality.....	13
• Load Balancing	14
• Predictable Delivery	14
• Access to Leading-edge Technologies and skilled personnel	14
• Channel resources.....	14
References.....	15



Introduction

In the era of globalization and specialization outsourcing non-core activities to third parties has become a universal tool, helping companies to concentrate on their basic, profit-generating activities, while letting professionals take care of secondary business processes. As businesses seek to cut costs and streamline their operations, business process outsourcing (BPO) is increasingly being considered as a business strategy. Companies in today's marketplace are seeking true overall strategic engagements beyond the traditional service-centered outsourcing arrangement.

" India is the dominant offshore player with more than \$4 billion export industry that is strongly supported by government initiatives. Today, there are 400,000 IT professionals employed in software export endeavors, with 60,000 to 70,000 new IT professionals entering the workforce each year. Indian companies have been committed to high quality in their endeavors. Major benefits of Indian companies include familiarity with English, strong engineering schools, attention to quality, government encouragement and application outsourcing services provided offshore or onshore." -*Gartner*

What is Outsourcing?

Outsourcing takes place when one company hands over operational responsibility for one or more of its non-core functions to another company. The arrangement can be structured in various ways depending on the needs and expectations of both parties involved.

Delegating non-core functions to experienced specialists outside of the company empowers the company to focus its main resources within, on developing the core business in which it has expertise. Studies reveal a satisfaction level of 84% amongst



businesses that outsource with reported benefits including increased competitive advantage, improved profitability and reduced operating costs.

What is an ODC?

An Offshore Development Center or ODC is a dedicated development center, located outside the client's premises, solely engaged in developing, testing and deploying software solutions and applications, most often in a country outside the client's country. The purpose behind an ODC is to take advantages of the technological know-how, cost advantages or the reduced time to market.

Establishment of an ODC

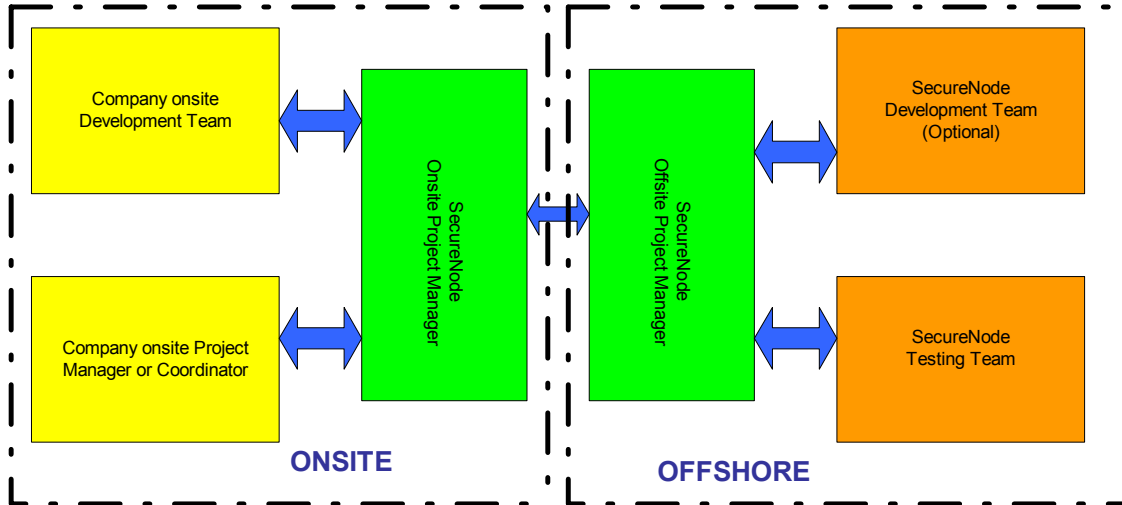
The process of setting up of an ODC is in phases. The initial phase is required to accomplish the infrastructure set up for the ODC – which would include setting up of the physical infrastructure such as Office equipment & Development Environment and also the assignment of professionals with relevant skill sets to the ODC. This phase takes around 4 – 6 weeks time. The next phase is very critical to the long term functioning of the ODC. This phase deals with setting up of a functional process, which will be implemented and improved upon through out the life of the ODC. A detailed discussion is held to decide on the process to set up the Communication protocol, operational efficiency/reporting structure, specific roles and responsibilities assigned to specific personnel.

A typical ODC Set-up

A Typical ODC setup can be diagrammatically represented as below. The below diagram is based on the assumption that the client has a fully functioning, though



limited development team which is onsite (located at the client facilities) and the Offshore Development Center works in coordination with this team through the client project Manager.





Dedicated Offshore Development Center

A dedicated Offshore Development Center will comprise of complete office space, infrastructure and resources dedicated to the client projects. The dedicated offshore development center can be a separate location or may be housed within the existing development center like SecureNode office in India, which will be based on the requirements of the client and the team, that the client wants to set up at the development center. In case the client starts with a small team initially and scales up the team at a later stage, the setting up of the development center would be done in a phased manner wherein for the initial stages the dedicated development will be allocated space at the existing development center and as the team is scaled up, based on the requirements, the team can be moved to a larger dedicated location. Outsourcing agency like SecureNode can handle the overall operations and administration of the ODC. The client can have their project Managers / Technical Managers managing the projects, if required. The dedicated ODC is particularly advantageous to clients requiring a dedicated team in India because of the various advantages that India offers without the necessity to establish its own facility (please see benefits section of this white paper).

Risk Management

Levels of Risk

There are arguably four levels of risk:

- **Strategic** - risks involved in ensuring business survival and long-term security or stability of the organization
- **Program** - risks involved in managing interdependencies between individual projects and the wider business environment



- **Projects** - risks involved in making progress against project plans
- **Operational** - risks involved in technical problems, supplier management and so on.

Higher levels of risk feed into lower levels; strategic risks will have implications at all the other levels, while operational risks are localized and limited in scope.

A risk may appear initially on one level but subsequently have a major impact at a different level. If a risk grows outside agreed upon limits, it should be decided that it no longer represents, say, an operational risk and may now affect the project as a whole. Depending on the scale of the change you are planning, you will have to analyze risks at one or more of these levels.

Types of Risk

Different organizations will face different types of risk. Some types of risk are as follows:

- Strategic / Commercial Risks
- Economic / Financial / Market Risks
- Legal and Regulatory Risks
- Organizational Management / People Issues
- Political / Societal Factors
- Environment Factors
- Technical / Operational / Infrastructure



Responses to Risk

When risks have been identified, you will need to evaluate them (assess the probability that they will occur and their potential impact) before deciding what to do about them.

How much risk you take will depend on the benefits you hope to achieve, as well as your organization's cultural attitude to risk and its ability to limit the exposure to risk.

- Manage down the risk by taking actions to prevent the risk from occurring
- Transfer some aspects of the risk - perhaps paying a third party to take it on; note that business and reputational risk cannot be transferred
- Tolerate the risk - perhaps because nothing can be done at a reasonable cost to mitigate it
- Treat the risk - take action to control it in some way
- Terminate the risk - by doing things differently and thus removing the risk, where it is feasible to do so.

Attrition issues

" By 2010, the employment potential in India would rise to 360,000 across all states as against a mere 24,000 currently in the BPO segment that includes the non-captive market. The Millennium BPO policy by the government is a step in the right direction and play a key role in ensuring to reach that target." *CEO of Ernst and Young, Shared Services (India), Sharda Cherwoo.*

Long-term prospects of outsourcing to India could be threatened by high attrition rates, price wars and lack of second tier management. Corporates outsource their work to such countries for hard, unemotional reasons of cost. However, if people turnover is high and



quality suffers, these people will simply move elsewhere. The number of IT industries moving to India has grown dramatically in past few years and if this trend continues, it will be hard for companies to retain the employees whom they hired at very low cost during the period of high unemployment when there were very limited choices for highly talented engineers.

A random survey in Bangalore, by one of the leading HR consulting firm Peopleone Consulting, puts the attrition rate in the BPO segment to around 25-30%. Besides, more attrition takes place within a few weeks of the joining the organization.

Although India has a huge labor market but attrition replacement is quite challenging. In India all companies require their employees to provide at least four to eight weeks of notice before leaving. This presents a major hiring challenge especially if you want to hire experienced professionals who have some experience in a multinational industry. I was quite fortunate to hire some people from US who were laid off and were willing to start at a quick notice when I was leading the R&D efforts in India for a US based company.

Cultural Integration

The change and the cultural shock created by outsourcing initiatives can severely impact business performance. Cultural issues and resistance to change are often intertwined in such a way that change management skills must be combined with an exceptional ability to understand and blend into the culture of destination country. Cultural issues resulting from outsourcing may about understand why, for example, a U.S. corporation needs to treat cultural issues with sensitivity.

Some projects like software maintenance and re-architecting can be executed 100 per cent offshore, whereas others like enterprise application integration demand almost 100



per cent onsite execution. The main factors affecting it are the efforts involved, communication required, cultural differences and time-zone differences.

India is a socialistic country so most of the jobs so far have been in the government sector. The government sector brings its own culture and way of working. People usually are laid back and work at their own leisure in such industries, which changing rapidly by huge influx of multinational companies.

This influx has lead to development of several organizations that just specialize in training and educating employees to handle client organizations' linguistic and cultural diversity.

Indirect procurement

IT procurement process can be frustrating in India due lot of rules and regulations in place and working with concerned authorities and departments who regulate the import/exports to and from the country can be quite challenging. We ended up with some equipment in India, which had to be returned to US and unfortunately the cost of shipping back was much higher than the cost of equipment itself, which was in thousands of USD.

Most organizations can obtain a clearer view of their requirements, better value for money, and a more effectively manage the process, if they plan their procurement needs ahead of time.

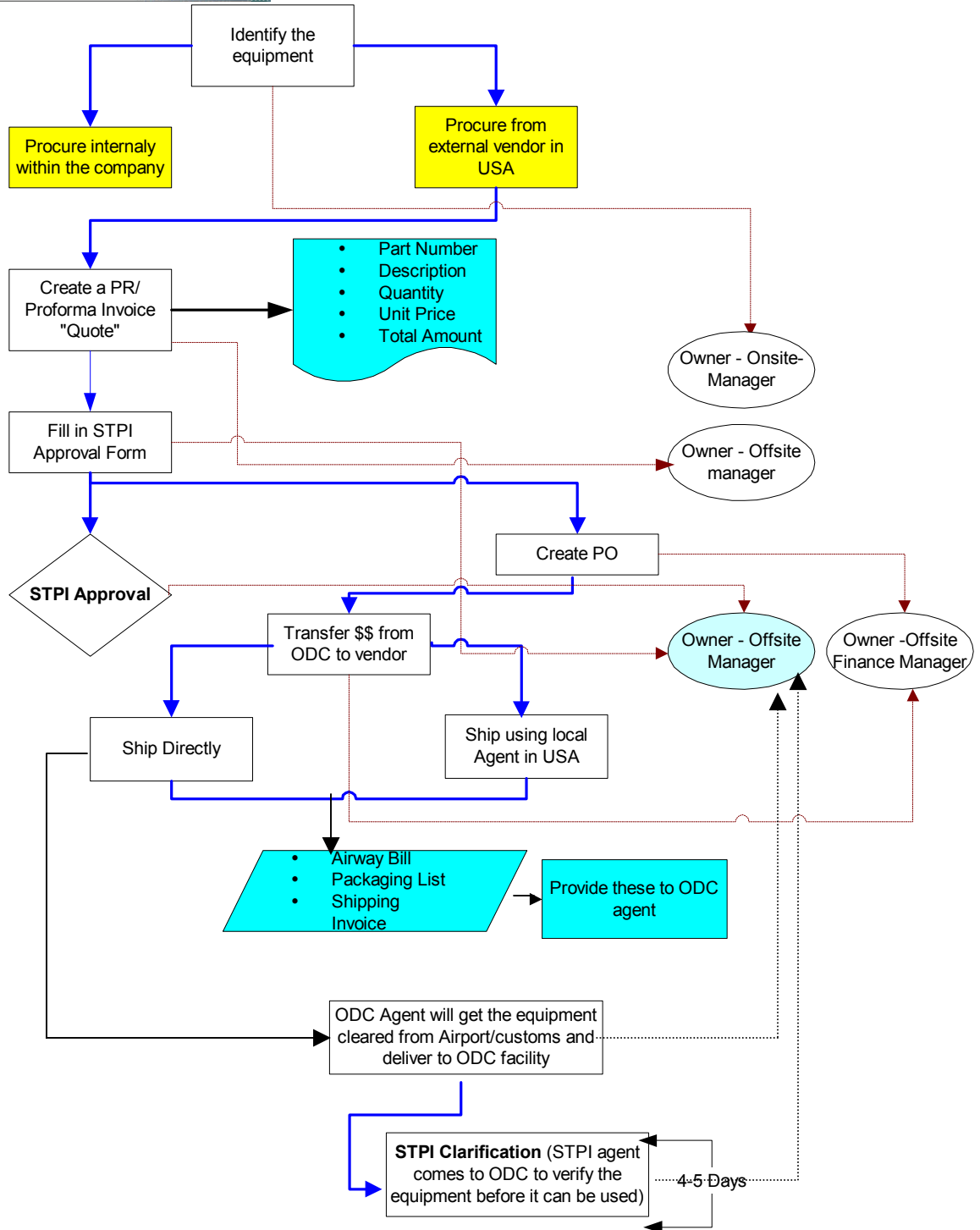
Some of the things to keep in mind while planning for equipment purchase for your R&D centers:

- Developing your procurement strategy
- Gathering and documenting a statement of requirements
- Short-listing the suppliers
- Negotiation prices



- Final selection of vendors
- Implementing and managing the contract with the vendor
- Revising the procurement strategy

Here is a simple example of procuring the equipment in or for India.



*STPI = Software Technology Park of India
 * ODC = Offshore Development Center



Benefits of Outsourcing

There are several benefits of outsourcing that provide strong advantages to international organizations:

- Availability of resources at a much lower cost;
- Availability of programming specialists;
- Technical expertise;
- R & D focus;
- Strong fundamental education;
- Experience with complicated projects;
- 24x7 work hours reducing time to market;

Gartner has done extensive research of outsourcing benefits in India, which are outlined below:

- **Reduced Cost**
 - India offers a very compelling value proposition for offshore services, at a substantially reduced price as compared to the western world. Organizations have realized upwards of over 40% savings with offshore operation as compared to local costs.
- **Quality**
 - India is most prominent worldwide due to a rigorous, disciplined programming style that is much evident among Indian programmers and software firms. Over 140 of Indian software companies are ISO 9001 certified. As per Carnegie Mellon, 21 of the 36 CMM Level-5 certified firms are in India.



- **Load Balancing**
 - If the in-house staff isn't adequate for a particular job, or there are peak periods of demand, or the work requires hiring personnel that will not be needed later, it is ideal to outsource the work to an outsourcing partner.
- **Predictable Delivery**
 - India's time zone has provided opportunities to achieve, a 24-hour development operation. By leveraging in-house and offshore resources efficiently, organizations can compress development cycles.
- **Access to Leading-edge Technologies and skilled personnel**
 - Indian programmers have developed a reputation for quickly adapting to new technologies.
- **Channel resources**
 - Every organization has limited resource pool. Outsourcing could help the current resource pool focus on core activities.

Source: Gartner



References

- <http://www.outsourceglobal.org/>
- <http://www.gartner.com/outsourcing/>
- <http://www.globaloutsourcing.org/>
- <http://www.gnp.org/india.htm>