# A look at the corporate strategies involved in technology business outsourcing

By Venkataramana Thummisi

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Introduction

The term outsourcing is not a new concept and has evolved in various forms from the early 1950’s when it was discovered to be a sound business strategy to reduce the cost of manufacturing in various sectors by off-shoring their manufacturing operations to developing countries which had a low cost skilled labor pool to the present stage where it has been adapted to other industries as well. Increased customer’s expectations, need for keeping the product costs competitive and the economic cycles which determine the profitability of businesses formed the motivating reasons for the rise of the concept of outsourcing or off-shoring operations popularly called as “Global Sourcing”. Global sourcing guaranteed manifold value in terms of lower operational costs, improved quality of operation, improved service delivered to customers as well as holding a competitive edge in the market.

Data collection – Methodology: The means of data collection for this research paper were in the form of guest lectures, personal and telephonic interviews with top industry executives, review of technical presentations, White papers from top outsourcing service providers as well as research firms. I had the opportunity to have a one-on-one interview with Pradeep Saxena – Vice President, Cognizant Technology Solutions, telephonic interview with Prasad Thrikutam, the head of the High Tech and Discreet Manufacturing business, Infosys technologies and review extensive research work by John McCarthy, Vice President, Forrester Research which was very helpful in providing insights into the basics as well as the current industry trends in outsourcing. The focus of data collection was as follows:

- General business practices and company specific best practices
Technology has been one of the most important change agents of the last century as well as current times which has radically changed the nature of doing business. Multiple skills and competencies combine to realize technology-driven business transformation which helps businesses to provide the maximum value to the customers and the stakeholders.

Increasing bandwidth, IP technology has virtually made the world a lot smaller in terms of networking the different geographies together. These became the catalysts for driving the outsourcing business in the technological sector especially the software industry. The concept of global sourcing had led to the large-scale success of the companies and significantly increasing the bottom-line revenue. Industry observers strongly feels that the benefits of Off-shoring are clear to those who have prior experience with off-shoring their business operations and dealt with outsourcing over a period of time and have seen
the operations mature and stabilize with time. The outsourcing providers have improved their business operations as well over time by bringing more predictability, proven business best practices and value delivered to their clients by adhering to various Industry approved business measurements like CMM, ISO, BVQI etc. Also the ‘peer pressure’ in terms of competition influence company’s decision to explore the possibility to outsource part of their operations as the companies become economically disadvantaged compared to their competitors and hence becomes very difficult to stay competitive in the market place. According to the data I have reviewed as well as talking to the industry experts, the cost savings typically seen from off shoring operations is in the range of 35-50% taking into account all the operational costs associated with it.

Paper Focus

Various Industry research firms viz Forrester Research, Gartner and Mckinsey Global Institute have extensively researched the Outsourcing practice and thus have greatly contributed to defining the Outsourcing models. According to Gartner, the sourcing practice can be broadly classified into the following phases:

- Sourcing strategy
- Evaluation and Selection
- Contract Management
- Sourcing Management

The focus of my research paper was to review and analyze the corporate strategies widely seen in the industry today and also explore the sourcing strategies available to a potential client and the strategies and rules of engagement in a typical global sourcing operation. Hence the focus was narrowed to the first three phases namely the Sourcing strategy,
Evaluation-Selection and Contract management. This paper makes efforts to document the industry best practices drawn from the business practices of the leading outsourcing providers in the high tech sector.

**Sourcing Strategy:**

Lately, it has become an accepted norm for companies to focus on the core business and to outsource the non-core business areas like the company’s IT infrastructure, HR, payroll etc to other experience service providers. Some of the pertinent issues that are important and worthy of analysis are to look at other core business reasons for companies to consider outsourcing as part of their business strategy other than cost. The operational constraints during the engagement with client and the service provider would determine the success of the model. This would essentially be alleviated by the commonly agreed metrics of performance and the parameters defined in the Service Level Agreements which is part of the contract negotiation between the service provider and the potential client.

**Need for outsourcing:** The efforts by the businesses to provide more value for the customer’s money and to the stake holders meant that they had to get better at doing “more with less” and be competitive in terms of pricing and product quality in order to grow the business. The concept of outsourcing or off-shoring is not a new concept. In the past, the Irish government decided to make a conscious effort to attract foreign companies to
Invest in Ireland. In turn, the government provided facilities to the “incoming” companies in terms of infrastructure and tax rebates. Added to this, the low cost labor available in that country made it economically and financially lucrative for businesses to establish their off-shore operations in that country. This concept got a new dimension during the late nineties and during the recent economic down turn, where the declining profits and revenues in account of slow down in the consumer spending made it no longer viable for companies to make a big ‘markup’ on the products and had to slash prices in order to remain competitive. Alternatively, cutting their operating costs was another option available for companies. Thus, companies started looking at other sourcing alternatives. Bandwidth, IP technology and other technologies as VOIP made it feasible for companies to set up remote off-shore centers and be networked as well. Over time, cost was no longer the only driving force towards global sourcing as companies realized the benefits were manifolds like speed of execution of the project, Reduce Time-to-market and the availability of the latest technology. The most important questions that need to be
addressed in order to achieve a successful off-shoring operation are the “What, How, When and whom to outsource. This is discussed in detail in the later chapters.

There are many opportunities and challenges associated with off-shoring. However, prior to making a decision about moving the operations off-shore, it is critically important for the clients to thoroughly educate themselves about the chemistry of the off-shoring business by consulting with potential vendors and attending industry sponsored conferences and seminars. The biggest mistake committed by clients in this sector is the expectation to reap the complete benefits a bit too early. According to John McCarthy, Vice President of Forrester research who has researched this sector over a period of time and contributed many research papers to benefit the industry, writes in his paper titled “Off-shore governance evolves over time” that Industry observers believe that there is no "Right" single, secret formula for success of the Global sourcing business. The companies realize the benefits by a single or combination of models like off-shoring by
leveraging diverse geographic economies and utilizing single or multiple vendors or setting up their off-shore centers. However, Cost as a main driver of outsourcing and it has typically resulted in bottom-line savings of about 35-50, but the cost of executing the project represents about 40% of the total costs and the rest of the expenditure is accounted by project management, analysis and design, testing, and ancillary activities.

Hence a lean and systematic approach to the different phases of a project is extremely important in achieving optimal cost of a project. It is easy to lose the benefits of cheaper off-shore resources by inefficient re-work if requirements are not adequately documented or communicated.

**Selection and evaluation**

During my interview with Prasad Thrikutam, the head of the High Tech and Discreet Manufacturing business unit at Infosys, he informed that they do pilots of a given project to demonstrate to the customer the economic and operational viability of the project. Once of the main reasons how Infosys has been able to get repeat business from its clients is attributed to the predictability and the bottom line responsibility that it brings to the entire project. He said that every project is unique on its own and carries diverse set of static and changing requirements from the customers. Infosys incorporates the “Change management” methodology in the way it does business with the customers. It works around two important parts of any project, people and the processes. For every new requirements required by the customer, It initially performs a “dip stick estimation” to quantify the variables of the project in terms of dollar value and the increased amount of time required to complete the project with the new set of requirements incorporated in to the original project deliverables.
**Cost driver:** Though one of the primary reasons for moving companies off-shore is cost, the service provider with the lowest price does not get the contract always, cost is just a part of the overall selection strategy adopted by the clients like vendor’s infrastructure, vendors prior experience with outsourcing, availability of domain expertise, language and presence of the company in the clients country of operation etc. According to Pradeep Saxena, Vice President, Cognizant Technology Solutions, "Cost is important but not the only facet of outsourcing business. He informed that the top 5 Indian outsourcing providers have the highest quality and standards for project execution with CMM Level 5 certifications where as most other companies are Level 2. Thus the top 5 firms are really distinguished by the business and process models and the prior expertise in the chosen field that they bring to the table which prove the business worthiness of the vendor of how to work with a client. Other areas of expertise expected from the vendors include

- Outsourcing Project management expertise
- Predictability
- Change Management methodology
- Bottom-line responsibility
- Risk Management and mitigation
- Domain expertise
- Process certifications
- US Presence
- Adaptability to Client’s culture
- Good working knowledge of English Language
- Vendor’s clientele list.
Corporate Strategies

The outsourcing vendors have come a long way and have evidently focused on leveraging new technologies in a proven, cost-effective fashion which help the gain the insight to construct targeted solutions for each client situation. This essentially has helped the outsourcing providers to enable their staff have a good record of being able to determine when a technology is mature enough to be put into production, and how to architect information systems that take advantage of upcoming advancements ahead of time. This is very important since business is dynamic in nature and the dynamics keep changing due to the environment, customers and also the internal structure and hence the ability to being innovative and think ahead in time and the ability to take a peek into the future is absolutely essential.

Outsourcing models:

The mature models that have evolved in the area of global sourcing are the following:

1. **Operations entirely managed by Outsourcing vendors:** In this case the entire outsourcing operation is contracted to an outsourcing vendor who will manage the operation for the customer based on the agreed methodology of operation as follows

   **Build–Operate-Transfer (BOT):** In this method of project as applicable to a technology sector, the vendor builds the necessary infrastructure, communication, hardware and software. The vendor then stabilizes the clients operation for an agreed period of time and also educates the customer about the processes and methodologies of the operation before transferring the entire operation to the client. Examples are: Pharmaceutical, biotech companies outsourcing their IT
operations to a vendor who builds the project before transferring back the operation to the client.

**Build-Own-Operate:** In this method which is relatively gaining popularity, the client outsources or transfers the entire operation identified as a potential operation to be outsourced like the client’s IT infrastructure and the vendor builds or fine tunes the client’s prior infrastructure depending upon the specific case and client pays the vendor for the service provider. Such kind of contracts usually last for a period of 10 to 15 years which is likely to be renewed. Examples are the recent outsourcing of the entire outsourcing operation by JP Morgan to IBM, Outsourcing of targeted business practices of financial institutions like American Express to various outsourcing providers.

**Build-Own-Operate-Transfer (BOOT):** In this method of operation, the client contracts the identified non core operations to the vendors on a long term where the vendor builds the infrastructure, operates and stabilizes the efforts before handing over the operations back to the client in the long term.

The vendors, in order to provide the best value to the customer are increasingly aligning their businesses along the lines of Verticals and Horizontals with domain expertise rather than geographies. Thus it is common to see service providers aligning along industry practices such as Finance, Healthcare, Manufacturing, High tech sector etc. This provides the vendors the added leverage to convince the customer about their ability in executing a project as well as serve as Consultants on specialized fields which helps in devising the best possible strategy in managing a given project for the vendor.
Another aspect of vendor business model is the standardization of business practices through certifications. Various Industry standards exist to bring predictability as well as credibility to the vendors in establishing their credentials to a new client. Various certifications exist like Bureau Veritas Quality International (BVQI), Capability Maturity Model (CMM), and ISO etc. These models are used to judge the maturity of the software processes of an organization and for identifying the key practices that are required to increase the maturity of these processes. These models effectively certify the processes and the methodologies practiced by the vendors adhere to a particular standard.

2. **Clients off-shore centers** : In this method of operation, the client sets up an off-shore facility which is usually a mirror facility of its local facility to take advantage of the time difference, cost of labor and also tap into the abundant technical resource available off-shore. Examples include General Electric, EMC Corporation, IBM, Hitachi, etc

3. **Hybrid model** – Combination of the both the above. This model involves a share of both the above models and the client decides to have an optimal mix on sourcing their operation globally. Examples include the big players like IBM, Microsoft, Intel etc
Based on the data collection and review of prior research, it is evident that Management, process and Performance metrics are the most important entities of a successful global sourcing model. Intense management time and strategy generation is required for the continuous success of the global sourcing model.

An effective management team induces the required business strength in taking the organization forward to address the previously mentioned business drivers and thus achieve improved cost structures, quickly respond to the competitive environment. A proactive management can impact a business and the industry in a positive way than a reactive management which strives to cope with a changing environment. Outsourcing has helped the technological sector to change for the better and respond to the recent downturn in economy by enabling the companies to lower their operational costs and also bring in new innovative products. A successful management team can transform the IT
organization as well, changing the roles and responsibilities of technology professionals and also the interdependent relationship that is maintained between the two entities.

**Management best practices:**

- Ensure transparency and clarity in communication to the customer.
- Assure predictability to the customer in the execution of the project.
- Ensure good corporate governance in handling the overall project viz management, security as well as adherence to regulatory issues.
- Ensure a right balance of executives in the off-shore/onshore model.
- Ensure constant communication between with the client in order to review and rectify the client requirements and also to ensure the project is on track.
- Make a realistic estimation of a client’s project understanding the requirements of the client fully well.
- Ensure that a fully operational and realistic performance measurement tool is in place to track the progress of the off-shoring efforts as well as enable the client understand the progress of the process completely.
- Ensure that performance audit reviews and a specific Service Level Agreements are documents.
- Customize the project and process strategies to suit the customer’s specific environment and needs.
- Ensure that the overall strategy is scalable to suit anticipated surges in customers business and re-deployable with minimum changes to other areas of the customer’s organization.
- Ensure faster knowledge transfer and ensure faster cost savings to the customer.
Process: The underlying current of a business is the mature process that the management can build around the business goals which ultimately determine the success of a business. The same thing applies to business off-shoring as well. The relationship that is built between with the client needs to be endured and built upon to approach the issues of process stability, change management, knowledge review and transfer, a variety of approaches to distributed workflow which helps in maturing the process and strategies. There is a strong need for a good definition of a process followed by an effective development of the process to address the user requirements. Then there is a need to look at standardization and implementation of the process globally.

Thus off-shoring companies have built expertise and have matured their project management team in terms of project evaluation, customer contact, build and release teams, process management teams etc and they all adhere to their respective best practices. Part of this has been achieved by a status tracking tools like Clarify front office which helps in globally distributed on-shore and off-shore teams sharing a common database to update review and track the progress of the project. The core idea here is to not build the industry’s most sophisticated tool in place, but a simple, manageable and easily understood tool.

Performance Measurement: Most organizations adopt some kind of a method to measure and track the progress of a project. However the real need of the hour is to adopt a “Systems thinking and a systems engineering approach of measurement, review and modifying the process based on changing dynamics of the project while still adhering to the business goals. They fail to understand the complexity of the process of outsourcing due to the global nature of the project.
**Communication:** A constant channel of communication facilitate the dynamics between the process, people and technology is very important and especially in off-shoring business as the levels of communication required for the continued success of off-shoring operation is manifold. Teams from diverse geographies coming from different background, culture and language need to talk the same language in terms of realization of common goals. This is the most challenging aspect of off-shoring business. This is partially mitigated by countries like Ireland, Australia, India and others who predominantly have English bred professionals who are well versed in English language and their grasp of the technology is also very advanced. It is this important entity which serves as a lifeline of any off-shoring initiative.

A typical off-shoring initiative by service providers from non US countries like Infosys, Wipro or Cognizant technology solutions involves the off-shoring team members spending a significant amount of time on a daily basis on communicating with the onshore/off-shore teams as well as the client by conference calls. Also regular client as well as internal strategy meetings and regularly brining team members to the client’s site is a regular feature. Also in order to maximize the communication between the internal teams as well as the customer, off-shoring companies maintain minimum formality in terms of communication and generally there is no set hierarchy among team members in discussing ideas, strategies etc for the success of the project. This helps the off shoring teams to make better decisions and enhance the time for project completion or to speed up the resolution time for any outstanding issues.
Contract Management

The need for an effective and beneficial relationship between the vendor and the customer arises from laying a strong foundation to the collaboration by means of laying out an effective terms, conditions and expectations from both the parties from the relationship. A detailed and effective scale of measurement as well as signing a fully functional Service level agreement (SLA). A typical SLA may incorporate the following goals.

Service Level Agreement (SLA) – Some of the commonly found parameters in a service level agreement are as follows:

Legal Terms

- Accounting terms
- Import-Export policy
- Payment terms
- Early termination policy
- Late delivery clause
- Code of conduct
- Business ethics

- Business terms
  - Clear and precise definition and Scope of work.
  - Clear definition of performance goals with regard to the following
    - Time, Labor and Material cost (TL&M)
    - Project Deliverables
An important goal of a post project agreement in the contract management stage is means to measure the successes of an off-shoring initiative. The business relationship arising out of such an initiative shows its implications in terms of cost benefits and efficiency of operation with passage of time. According to Shibulal, Co-founder and member of the board, Infosys Technologies, The reduction in in-efficiencies in a particular off-shoring project measured over a period of about four years is as shown above in figure. Similarly the productivity increase in the operations measured in a similar time span is as shown in
above. The performance metrics of an off-shoring operation can be gauged by the following parameters.

- Number of deliverables completed on time
- Productivity ration per team member
- Cost/team member ratio
- Average number of glitches identified per module.
- Average response time to resolve modular inefficiencies.
- Number of escalations in the overall project.

Obstacles for global sourcing

“Based on your experience, how challenging are the following when working with offshore providers?”

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Not a challenge</th>
<th>Some challenge</th>
<th>A challenge</th>
<th>A major challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>My company's lack of project management skills</td>
<td>18%</td>
<td>29%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>We do not have a good process for specifying the work</td>
<td>10%</td>
<td>22%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>We do not have the right performance metrics for managing their</td>
<td>20%</td>
<td>16%</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>They lack high-level business and industry knowledge</td>
<td>18%</td>
<td>12%</td>
<td>22%</td>
<td>47%</td>
</tr>
<tr>
<td>The cultural differences between their staff and ours</td>
<td>12%</td>
<td>30%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Their quality/project management processes do not support larger</td>
<td>10%</td>
<td>22%</td>
<td>22%</td>
<td>57%</td>
</tr>
</tbody>
</table>

Base: 44 firms using offshore providers

Source: Forrester Research: Unlocking the Savings in Off-shore - by John C. McCarthy

Though, the outsourcing operation presents a range of benefits, since it is an evolving process which is maturing over time, it faces certain constraints and obstacles. The benefits of off-shoring are gaining a lot of popularity and every business is striving to
jump on the Business Process Outsourcing (BPO) bandwagon. Hence it is very likely that the outsourcing sector will see a big boom in the foreseeable future. Increasingly many management’s and investors are encouraging professionals to move work off-shore, coupled with the impact of competitors’ off-shore initiatives, will force even the reluctant bystanders, A word used by John McCarthy, Forrester Research in identifying the companies who are reluctant to outsource their operations.

All technological companies need to anticipate the future trends in the outsourcing sector. Off-shore services providers need to constantly look for ways to do things faster better and at a lower cost and think strategically. A typical example is Bangalore, India which has witnessed a peak in the outsourcing boom which has made the majority of fortune 500 companies to set up off-shore facilities to tap into the cheap and also a very techno savvy labor pool. However, with ever increasing growth, Bangalore is slowly becoming a costlier place to do business. Another aspect is the increasing rupee appreciation in comparison to the dollar value which is making companies like Infosys, Wipro and others to think about other low cost places within India as well as Asia Pacific countries like China, Mauritius etc. Some of the other concerns in these areas are:

- A negative momentum building on U.S.employee morale towards outsourcing resulting in employment loss.
- Communication problems interacting with the vendors of diverse geographies.
- Process and quality issues
- Concerns about transfer of corporate IP which is not very well understood and practiced in third world countries
- Cultural and language issues
Quantum increase in off-shore operations with professionals from foreign countries will hasten the knowledge transfer and Intellectual property of the United States to those countries. This gives rise to concern about the depleting U.S. R&D organizations getting hurt in the process. The increasingly depleting prospect of landing a technological job is discouraging students from taking technology related fields as a career option. Hence the real way of addressing the outsourcing operation should be to develop technology where it costs less irrespective of whether it is United States or not. Outsourcing companies need to be aware of the "kitchen sink" model where the company outsources everything and leaves so few functions in the U.S. that its off-shore operations actually hamstring its competitiveness.

It is a well known fact that Communication is the lifeline of any project involving team interaction. Lack of communications necessitates reassessment of the capacity to support an off-shore development project. This must be re-enforced by regular conference calls, e-mails, and instant chat sessions which are not only for sharing information among the geographically dispersed teams, but also are important for avoiding any of the glitches in communication that can impede the progress of the offshore project. There needs to be a strategy in place with details about the mode of operation throughout the cycle of the project. There are a lot of inherent complexities in geographically dispersed teams that needs to be addressed upfront with respect to native culture, background etc. The various modes of communication tools that can be put into practice are Email, Video conferencing, instant chat, VOIP technology, Common system sharing, conference calls etc.

**Risk Management**
According to Prasad Thrikutam, Infosys technologies builds into its process a method to accommodate the unpredictable or extraneous circumstances that might arise in the project life cycle. They look at the probability of risk occurrence and its impact. The then evaluate the specifics of risk based on prior expertise and the data available and classify the risk associated with a particular task in terms of Low, medium and high and act accordingly with the concurrence of the customer.

**Next Generation of Off-shoring-Rise of strategic sourcing**

According to Nandan Nilekani, CEO of Infosys technologies, in the early days of outsourcing, there were these mega deals where a company would sign a multi-year, multi-billion dollar deal and it would hand over everything hardware, software, employees, the works to an outside company. However this is slowly becoming out of trend and is not favoured anymore. The problem with that model is that companies end up with a huge contract with hardly any day-to-day business flexibility.

Today, Nilekani said, the trend is towards “smart sourcing”, where the outsourcing company, the client, "retains the reigns of strategy". The typical nature of operation involves the companies having an IT group which looks at what is required to make its business more competitive: what should be the right architecture for the firm, what are the quality standards that need to be used, how to adjudicate between different demands for budgets, how to spend money etc. This will not be handed over to someone outside. adding that, "This is the new outsourcing model. The old model is pass, where you hand over everything and hope something works." He, however, believes there will still be large contracts like for outsourcing network management. As for $100-million
plus orders, he said, "I don't know how many of those orders exist at all. But every year the size of the orders that Indian companies are getting is going up, so is the revenue per customer. We have three customers who are $40-million plus which wasn't the case even two years back."
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