INDUSTRY INSIGHT

International service outsourcing

Using offshore analytics to identify determinants of value-added outsourcing

Arindam Banerjee
Indian Institute of Management, Ahmedabad, India, and
Scott A. Williams
Independent Management Consultant, Glencoe, Illinois, USA

Abstract

Purpose – International outsourcing has been traditionally looked upon as a low end cost effective servicing option to take advantage of the cost arbitrage that exists across countries. Of late, many outsourcing vendors have realized that the advantages of cost differentials that spurred a lot of the global outsourcing business in the past 20 years will disappear in the medium term. The purpose of this paper is to provide a perspective about how much value addition, besides cost, traditional outsourcing vendors can provide and what may be the facilitator/inhibitors of such activities.

Design/methodology/approach – A case describing the setting up of an offshore analytics operation is presented, which gives a backdrop to the challenges faced in relatively high end value creation processes in a remote outsourced (offshore) environment. This provides some empirical support to a proposed model for facilitating the outsourcing of value-added services.

Findings – A model is proposed for determining the degree to which value-added services can be outsourced. The key dimensions that influence the degree of outsourcing are: the expertise of the vendor; the environmental stability of the offshore domain; the physical barriers to outsourcing complex business processes such as, communication problems and proximity issues; the possibility of knowledge leakage from the outsourcing domain; and the cost benefits of outsourcing.

Practical implications – The paper contends that conventional offshore-based service vendors may find it difficult to acquire “expert power” and, set aside negative perceptions of “environmental stability” of their domain, in the pursuit to climb up the value chain in their client organizations. The validation of the proposed model is an opportunity for future research.

Originality/value – This paper is one of the first to present a model that will govern the growth of international outsourcing opportunities in high-end value-added processes. It also provides some directions for outsourcing vendors to enhance their capabilities over time to leverage this opportunity.

Keywords Outsourcing, Value added, Competitive advantage, Operations management

Paper type Viewpoint

The conventional definition of outsourcing is to buy a service from an outside party (Agent) who is beyond the managerial control/perimetre of the client organization (Principal), on an ongoing basis for a transaction fee. The “intellectual” property rights to the service provided may be negotiated in ways which differ based on the nature of the service provided, and the degree of customization added for the Principal. Generic services, such as basic voice and data transactions which are required by many clients offer little opportunities for differentiation. Hence, protecting intellectual property rights on service dimensions is not a relevant issue in determining the possibility of outsourcing such functions. Value creation in such cases is not determined by the quality of a service provided, but by the speed of delivery at the lowest possible cost. Such activities are categorized as routine process outsourcing which largely take advantage of the cost arbitrage across geographies.
While global reassignment of work to take advantage of labor cost arbitrage has been in practice for a long time, it has gained impetus and political visibility in the past 15-20 years. More importantly, what was earlier considered to be a significant cost-based differentiator has by now, been relegated to a hygiene requirement for most organizations. A primary reason for this change is that most processes that have been relocated to low-cost countries are sufficiently standardized. Additionally, the large availability of talent in these countries has ensured quick and seamless acquisition of required skills to deliver such syndicated services at the most efficient level.

This transformation of a competitive advantage in earlier times, to a mere hygiene requirement today has put immense pressure on Principal organizations to look for more sustainable ways to stay ahead of competition. On the other hand, service vendor organizations have also realized that it is no longer enough to provide efficiency driven services. They need to find ways and means to add managerial and/or technical value to stay ahead of competition in their vendor market space.

This paper attempts to provide a perspective on how much forward integration is possible for outsourced service providers given their competencies, accounting for the motivation of the client organization to encourage such attempts. The assumption made here is that forward integration for the outsourced supplier is the preferred route to provide value added services.

1. Traditional outsourcing philosophy
   As mentioned earlier, outsourcing has historically meant parsing out functions to entities beyond the perimeter of the principal organization for various purposes, such as: reducing operational cost, reducing headcount, to offset scarcity of resources in the principal domain or for buying specialized skills unavailable in the principal organization (Kurien, 2005). The last motive is mostly linked to the necessity of incorporating a special skill from outside that may not be available within the organization. Usually, this type of outsourcing is of limited nature and is mostly related to value-added services purchased sporadically.

   The past 15 years of steady integration (globalization) of the world economy has primarily addressed the first three of the above mentioned objectives of outsourcing. For instance, Bhagwati et al. (2004) have explained the impact of outsourcing on the global economy primarily on the dimension of job loss in more affluent economies. On the whole, they have postulated that the global economy has progressed significantly despite the marginal job losses in the affluent countries.

   Similar arguments are made in other studies (Spencer, 2005; Grossman et al., 2005). However, many of these research studies on international outsourcing and others in the context of domestic outsourcing (Ang and Straub, 1998), have primarily focused on issues related to the traditional cost-centric dimensions. The authors have found little documented research in the area of value-based outsourcing where the cost consideration is truly secondary in nature. One such study by The Mckinsey Global Institute (2005) identifies three significant physical parameters which can influence the nature of outsourcing activity in the global market:

   (1) The requirement for proximity to customers may limit the amount of offshore (international) activities.

   (2) The requirement for domain knowledge which resides mainly in “on site” locations may offset some of the advantages of outsourcing, especially in the context of offshore environment.
(3) The complexity of the process can also dictate the (in)ability to outsource. Usually, processes that require multiple iterative transactions across functional teams are less amenable for off shoring (outsourcing).

Some of these physical parameters that provide constraints in outsourcing processes are to an extent mitigated over time with familiarity of managerial personnel, and improvement of communication channels between offshore and onshore sites. What is not so well established in this study and others, are the strategic drivers of value-added outsourcing activities. In the next section, we describe a candidate model that explains the drivers of such high-end outsourcing activities.

2. A perspective-based model for outsourcing value-added functions

Many of our own experience in building and managing a value-added offshore[1] operation have led us to identify significant hurdles. A common refrain that we have heard in the industry is that international outsourcing will continue to remain a back office support function for long; it has a long way to traverse before it is fully equipped with business knowledge to add value to the decision making process.

A logical question that some of us have asked ourselves often times is, why should onsite managers help scale up business domain knowledge in offshore locations to enable smooth transitioning of critical functions overseas? With the following framework based, we have attempted to postulate the dimensions that necessarily impact the rate of such built up.

We define a “value-added outsourced” function on some or all of the following dimensions:

- the process is considered by the Principal as critical for making business impact as measured by its direct impact on profits;
- the process is not entirely replicable by the Principal’s nearest competitor and hence provides some competitive advantage;
- the process involves a transfer cost which is considered to include a premium significantly higher than a cost-driven process; and
- there are few outsourcing vendors who can replicate the operations of the Process like the specific outsourcing vendor being considered.

We propose the following dimensions that will impact the extent of outsourcing of such a “value-added” function (see Figure 1 for graphical representation).

2.1 A source of relevant and critical expertise external to the organization (Expertise)

An outsourced vendor may have knowledge/expertise, which is unavailable internally and hence the Principal may seek such assistance in further enhancing its differential capabilities vis-a-vis the competition. Such circumstances prompt willingness to outsource high value-added services to the service provider. A basic condition to be fulfilled for this relationship is whether the service provider has enough or more domain knowledge and expertise than the client.

2.2 The ability to “Ring Fence” the differential expertise obtained from the external source (Leakage)

Both Spencer (2005) and Suffredini (2003) refer to the problem of drawing the perimeter around the propriety knowledge of the firm, with implications on dilution of control.
Historically, research in the area of Principal-Agent theory has looked at the terms of the contract that minimize the “leakage” of proprietary expertise (Antrás, 2003; Grossman and Hart, 1986). Suffredini (2003) also mentions the impact of residual leakage, i.e. the “subliminal” transfer of broader expert knowledge to the industry. When the impact of such transfers is significantly adverse, high-end value outsourcing activities are discouraged.

2.3 The likelihood of parsing out a separate portfolio of tasks that can be handled independently with little inter team coordination (Independent operations)
This dimension is most likely to affect international outsourcing potential in high-end value addition processes. Parsing out functions to outsourced vendors, especially in remote locations suffer from the challenges of co-ordination across various multi-functional managers. In such complex problem solving situations, proximity of service providers to the decision maker is critical and often times non-negotiable. The Mckinsey Global Institute (2005) research mentions this dimension as a critical constraint in outsourcing activities.

2.4 Does it require proximity to the end customer? (Proximity)
Many critical value added services require physical closeness to the end consumption point (last mile issues). Such services are not amenable to international/remote outsourcing since physical distances cannot be compensated by equivalent communication technology. This dimension has been mentioned by the Mckinsey (2005) study as well.

2.5 Stability of the external environment at the international service provider domain (Environmental stability)
Mission critical high-end services require a stable operating environment, more so compared to low-end critical services. In the latter case, contingency plans can be developed and redundancies can be built across multiple remote sites. However, given the novelty value of high end services, they are usually not amenable to conventional contingency measures because of high replication costs. Hence, such processes require
tighter insulation against environmental instability to ensure that critical disruptions are avoided.

2.6 The possibility of obtaining a cost advantage (Cost advantage)
This dimension would be of secondary nature in the context of outsourcing critical business functions. However, all other effects being equal, low cost of delivery has its importance in deciding on where to outsource.

2.7 A case study: offshore analytics as value-added services
In order to provide some empirical support for some of the dimensions of the model presented above, we present a business case of setting up of an offshore Analytics organization in India in the last four years to support a banking operation in the USA.

In India lately, outsourcing organizations have been providing more value-added banking services (e.g. financial and market analytics, equity research). Although about 20 large global banks have made significant investments in back office operations in India in the past decade, most have been low end “voice” and “data” transactions. Of the value-added activities, most employ trained graduates, post graduates and some doctorates in the fields of science, social science and business management. Industry analysts suggest the market size is approximately USD 300 million, employing about 10,000 personnel and increasing at the rate of 50 per cent annually (Mishra, 2008).

The authors led the creation of a 90-member back office analytics team to support the credit risk and marketing functions for a large consumer loans business in the USA. Although there were sharply lower wage scales between India and the USA, the primary reason for creating the team was to take advantage of the enormous talent easily available to run the operations.

Three organizational models were considered for the new team. The first was a “functional silo” approach with whole functions based in India, reporting to a locally-based manager, and involving limited US manager responsibility. The second was a “team extension” approach. In it, India resources are directly assigned to US functional teams with US people responsible for work management and Indian managers handling administrative activities. The third was a hybrid approach with shared reporting, the creation of analytics (particularly a new research and development group) and an eventual transition to a functional silo model.

In any of the models above, the new group would exist within the global bank’s offshore servicing entity. Although this entity was primarily involved in offshoring low-value transactions (e.g. check processing, imaging), it was to act as a “hotel” for the new analytics team. The US banking operation would determine hiring, staffing, promotion and compensation for the analysts. In addition, they would be separate and apart from any other analytic teams being formed in India (e.g. investment banking).

We adopted the team extension approach to accelerate India productivity and knowledge transfer. The team was to be fully managed by the home office management since domain competency was entirely enshrined there. The offshore team was to act as a support team for policy-making and would provide its services in areas of its technical prowess. Business interpretation and implications on decision-making would be driven primarily by the home office (onsite) managers. Functional responsibilities would be minimal as the offshore office was not expected to acquire any functional expertise in the medium term. However, it was recognized that clusters of responsibilities pertaining to “technological skills”, such as applications of statistics, mathematics and business programming, that could be undertaken independently in a
remote location, would over a reasonable time be transferred to India. Policy making, on the other hand, would be almost impossible to transfer given the necessity of its proximity to the business domain. Local administration in India would be restricted to maintaining hygiene work environment and compliance with local work laws.

This operating model is based on the premise that offshore provides technical talent, whereas the onsite management’s responsibility lies in bridging the business knowledge gap that exists in the offshore office; the latter is assumed to limit the usage of offshore resources for critical value-added work.

Three years into the operation, and despite rapid expansion and increases in productivity, the team remains primarily a back office service provider of technical inputs (statistical modeling, forecasting and data enquiry) to the front office policy-making process. Contributions to direct policy making are restricted to newer insights that indirectly feed into calibrating certain operational processes, but for most parts the responsibility set includes completing disparate tasks set up by front office managers. Local managers are primarily “people managers” and do not necessarily have functional responsibilities commensurate with their seniority in the organization. A significant portion of their responsibility has to do with facilitating smooth work flows across office and co-ordinating information/communication gaps across team members based in offshore and onsite offices.

Other local operating managers at this particular offshore operation confirm that the back office value-add functions are more about running high end technical processes such as: developing statistical scoring models, forecasting losses, generating routine reports and performing ad hoc analysis; these activities have less to do with the actual function of developing or recommending credit policy measures, and are more about supporting such decision-making with processed information from business data.

In hindsight, we compiled an array of both positive and negative observations from the three years the analytics team has been in place. These are detailed in the Appendix. While there is some debate in the business process outsourcing (BPO) industry (specifically, the knowledge process outsourcing (KPO) segment) on the need to provide end-to-end service to survive competitive pressures, on the whole this service industry continues to remain highly fragmented and focused on specific tasks and activities rather than business solutions. Specifically, on the analytics area, what is interesting is that the global analytics/survey research market is valued at USD 10 billion, but only 40 per cent of it is operational enough to be outsourcable (Mishra, 2008). This is important enough as a fact to support the view that there may be limitations on how much of the business components can be outsourced.

3. Traditional cost-based outsourced service vendor and their ability to deliver value-added services

The traditional North–South demarcation (Spencer, 2005) in cost-based outsourcing may additionally dictate the perceived limits to which the high-end value servicing is possible in this business. For instance, the tag of “South”, hitherto an advantage in the cost arbitrage model, may pose a severe delimiter in building the right perceptions of “Expertise” and “Environmental stability” in order to facilitate high end international outsourcing. Traditional standards in the high-end service domain are spelt by “North”-based organizations, having leveraged their domain competency and technical expertise to provide high margin services (e.g. management consultancies such as Mckinsey).
While it may be early to make definitive conclusions, there appears to be a good chance that perceptions about “South”-based countries and their lack of domain expertise may take sometime to erode. Till then, it seems that “Cost advantage” may be the predominant reason to outsource processes, thereby limiting the nature of activities that can be transitioned internationally. Recent studies such as Rüdiger’s (2007) have claimed that job losses in the OECD countries are estimated to be only about 20 per cent due to international outsourcing. A primary reason for such estimate appears to be the inability of low-cost countries such as India to absorb higher potency work, mainly because of the lack of an environment that facilitates high growth of Knowledge-based products and services.

The implications of the above remarks are significant. Giving their current perceived low-end competencies, international outsourcing vendors, who are based mainly in low-cost countries, may face an uphill task of moving up the value chain of their client’s businesses. A major challenge would be to overcome the country-of-origin effect (“South” brand), something that may take longer than it takes to meet the objectives on the real capability front (Paswan and Sharma, 2004). Diluting the tag of a “South” image of the country would certainly have a positive influence in this attempt towards forward integration. As Rüdiger (2007) points out, the consolidation of the strength in human capital in the western hemisphere will ensure that international outsourcing of value-added jobs will be at best a slow process in the near term.

3.1 So, what is the future outlook for traditional outsourced service vendors in value-creation opportunities?

While the above exposition strikes a somber note on the future of value-added outsourcing, BPO organizations may use these potential impediments more as challenges that require immediate attention to overcome in the future. In this regard, here are some initiatives that are worthwhile to consider:

3.1.1 Organize BPO activities around the globe to take advantage of cost, expertise and proximity advantages. Recent trends at building a combination of offshore, near shore offices mainly take advantage of the cost and proximity issues. Onshore representation can also help in downplaying negative perceptions of “expertise” (Holstein, 2008) and unstable work environment in low-cost geographies. A senior manager overseeing a value-creation process at a prospective client organization had once commented to the authors that, he really did not care where the work got done at a BPO vendor, so long as he had the confidence that the vendor provided enough expert consultative resources at his “beck and call”. The challenge for organizations will be to build an optimal work flow around its global offices to effectively leverage its cost, expertise, proximity and work stability advantages offered by independently by various geographic locations.

3.1.2 Break the “umbilical cord” – the team extension model, as early as possible. Our experience suggests that managing international outsourced operations on a continued basis from onsite locations is detrimental to the long term development of the former. While this model may have merits in initiating transfer of knowledge to nascent offshore operation, eventually, the sense of comfort derived from continuous “hand-holding” has to be arrested. This will ensure that an independent outsourced entity is built over time that can effectively collaborate with the client organization in co-creating value. This implies that while “benevolent” clients that are willing to lend a helping hand in building offshore expertise are required, BPO vendors need to be wary
of being overly dependent on them long term. Eventually, expertise has to be transacted in both directions to develop a healthy partnership across the entities. The process of managing this transition remains an issue for further research.

3.1.3 Build domain expertise steadily over time. This should be obvious to all and, unfortunately, there appears to be no magic potion to gain domain expertise almost immediately. However, this remark emphasizes the need to plan early and look for opportunities to bootstrap on technical expertise, an advantage that many BPO vendors may have, to gain domain expertise in at least some of the “techy” driven processes in the medium term. Additionally, hiring business domain experts over time, especially in the onshore offices, can mitigate some of the nervousness that client organizations may have about outsourcing critical value-added work. Lastly, the maturing of markets in the “South” geographies will definitely help in alleviating the lack of “faith” that clients have in outsourcing business expertise driven processes to such domains.

It will not be foolhardy to stress the need for early planning. While making changes to the overall infrastructure and resource capability, the focus should be on the investment for the future rather than looking for immediate gains. Our experience shows that investment in business expertise will require time and organizational stamina and it is best done while the BPO organizations are still mining their traditional business models.

4. Directions for future research
This paper is a first attempt to discuss parameters that will influence the extent of international outsourcing of value-added services. However, no quantifiable data exists to validate some of the claims that have been made in this paper. Our inferences are mostly based on our own observations of the trends in the industry and experience from an offshoring domain. An appropriate next step would be to validate the value outsourcing drivers’ model with industry wide data on actual trends.

Additionally, the issue of “where can international outsourcing add value beyond cost arbitrage”, needs more thought. While it is important to note that the opportunities to provide value are not limitless, it is also critical for industry experts to know where future investments ought to be made to sustain a viable offshoring/outsourcing business model.

Finally, the authors based on their own experience, have identified some operational areas which require further investigation. They are as follows:

- What is the optimal model to successfully transfer business knowledge and expertise to an outsourced entity in the long run?
- How can clients be motivated to do so, given the number of challenges that have been identified in this paper?
- Are there some structural advantages with traditional BPO vendors which facilitate their creating a niche(s) for specific value-added services? Our experience did not reveal any such advantages, but we do recognize that traditional outsourced vendors work with multiple clients and hence, may be able to leverage industry knowledge in providing additional sources of value-creation, hitherto unavailable to client organizations.
- How do we disentangle complex decision making processes into components that can be seamless managed across different geographies in an outsourced
environment? This appears to be a candidate model of operation in the future and will require better understanding and control.

We hope that this paper will provide impetus in research in these important dimensions that will influence some significant outsourcing activities in the future.

Notes

1. We use the terms “Offshoring” and “International Outsourcing” interchangeably, since it is noted that, both structurally and motivationally, there are very strong correlations between the two types of operations. International (offshore) operations can be internally (within the Principal organization) or externally controlled. Either way, the operation can be categorized as outsourced if the controlling entity is different from the consumer of these outsourced services.

2. Business process outsourcing.


References


Appendix. India analytics operations – key insights
What worked well?

- **Strong organizational push for offshoring**
  - (1) Large corporate investments in global servicing centers in India and China.
  - (2) Multiple business lines moving to offshore high-end process (e.g. equity analysis).
  - (3) Internal, not external, provider of services.
  - (4) Attractive economics and internal incentives.

- **Vocal and visible executive sponsorship**
  - (1) Stated purpose was to expand base of skills, not eliminate US jobs.
  - (2) Could overcome initial and ongoing resistance.
  - (3) Linked senior team compensation to supporting offshoring.
  - (4) Made regular trips to India Office.
  - (5) Installed India Office manager as direct report.

- **Conscious upfront decisions**
  - (1) Selected trusted advisor as consultant and later India Office manager.
  - (2) Explicitly evaluated different organizational approaches.
  - (3) Sent experienced US manager over to India to assist with start-up phase.
  - (4) Insisted on standalone organization within global service center.

- **Aspirational hiring**
  - (1) Selected several strong PhDs as India Office managers.
  - (2) Specifically targeted top-tier business school talent.
  - (3) Called the team an extension of overall US organization (as opposed to a third-party group).
  - (4) Created career paths to US for high performing analysts.

- **Regular, ongoing process to overcome impediments**
  - (1) Developed India-based training courses (e.g. analytics, logical structure and reasoning).
  - (2) Sent analysts to US for month-long training with functional teams.
  - (3) Sent US managers to Bangalore to visit and build relationships.
  - (4) Regularly discussed operational challenges and recommendations.

What worked poorly?

- **Lack of proximity to decision making**
  - (1) Historical style of face-to-face interactions difficult to replicate.
  - (2) “Fire drills” or impromptu brainstorming sessions occurred in US offices.
  - (3) Tasks were often delegated to India Office without sufficient explanations of relevance.
  - (4) Concern about transferring mission-critical functions to India.
• **Logistics of long distance**
  1. 12-hour time difference created communication challenges.
  2. US managers regularly asked for later work, even though India team generally worked 2-11 p.m.
  3. It was expensive and difficult to send people to the USA or India for short visits.
  4. Perceived lack of control if cannot see each other.
  5. No informal relationship building was possible.

• **Cultural ignorance and insensitivity**
  1. Lack of understanding of India culture (e.g., holidays).
  2. No awareness of difficult of working environment in India (e.g., transportation system).
  3. Dialects could occasionally be difficult to understand.
  4. US managers acted as if India teams should be the ones to adapt.

• **Building trust**
  1. Continual concern that US jobs were going to be moved to India.
  2. Desire to protect important “tribal knowledge”.
  3. Several functional groups maintained an “us versus them” attitude.

• **Global services center**
  1. Did not know how to manage complex, value-added services.
  2. Imposed needless bureaucracy and policies more appropriate with lower value services.
  3. Insisted on arms-length relationship which fostered US mistrust of moving critical operations abroad.

• **Deteriorating conditions in US financial markets**
  1. Large losses in unrelated subsidiaries led to complete integration of US operations.
  2. Strong centralized approach clashed with independent business units.
  3. Risk appetite sharply dropped, cutting need for larger staff in USA and India.

• **Team extension model**
  1. Although entered for rational reasons, it was very difficult to transition.
  2. Institutionalized a fragmented approach to work allocation.
  3. Prevented job rotation and expansion of skills.
  4. Hindered ability to build the scope necessary to take on whole functions.
  5. Higher turnover destroyed productivity/economic gains.

**About the authors**
Arindam Banerjee joined the faculty at IIM Ahmedabad after working in the industry for over seven years. He has worked on business problems in the retail financial services, FMCG and consumer durable sectors. He specializes in developing business models based on statistical analysis of large syndicated databases. At IIM, he has taught courses in Quantitative Marketing and Research Methodology to post graduate and doctoral students. Prior to joining the IIM, he was a senior consultant at Mitchell Madison Group, a global management consultancy firm.
specializing in the financial services sector, based at their Chicago office. Previously, he has headed the marketing analytics team at AC Nielsen Corporation, Chicago. In the year 2006-2007 he went on a sabbatical from IIMA to work with HSBC to help set up an offshore risk analytics team to support the bank’s consumer finance business in the USA. Arindam Banerjee is the corresponding author and can be contacted at: arindam@iimahd.ernet.in

Scott A. Williams worked as an executive or consultant in the financial services industry for more than 25 years. In his last role, he was the Chief Investment Officer for HSBC’s Consumer and Mortgage Lending group in the United States, directing a national mortgage portfolio of more than USD 110 billion. He led more than 700 highly diverse people in the USA, India and Sri Lanka managing credit policy, underwriting, analytic services and data management. He championed the creation of a new analytics and data operation in India. Prior to joining HSBC, Scott was a partner with McKinsey and Company, focusing on risk management and financial services operations. He led a broad variety of engagements in consumer finance, captive finance, and small business banking. As a specialist, he provided consumer risk expertise to clients around the world, including Western and Eastern Europe, Latin America, Asia and Australia. Earlier in his career, he worked with Mitchell Madison Group, USF&G Insurance, J.P. Morgan and Company.