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Global IT Outsourcing Management: Key Influence Factors and Strategies

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Abstract:

The key focus of this article is to provide an understanding about the complexities involved in global IT outsourcing and the management initiatives needed for the successful implementation of a global IT outsourcing partnership. Technological advances combined with increased globalization and competitive pressures have forced many firms to consider alternatives that will reduce organizational cost, and at the same time create and/or maintain their competitive advantage in the global market. Increasingly, the phenomenon of global outsourcing is being considered by many firms as a solution to their IT needs and problems. With increasing recognition and confidence in the programming competencies of IT workers in India and other countries, offshore outsourcing has gained increasing acceptance among U.S firms across all industries.

Even though there has been a plethora of studies on domestic outsourcing of information systems, the research on outsourcing outside national borders (global outsourcing) has been scarce. One of the areas which lacks depth in the literature is in how to manage a global outsourcing partnership. Anecdotal evidence points to the fact that even the best outsourcing deals can go sour if not managed properly. In the context of global IT outsourcing, the management of the outsourcing relationship becomes even more complex because of the geographical distance and the difference in the national and organizational cultures of the client and vendor firms. This article identifies the key elements that should be considered while managing an outsourcing relationship with a foreign' vendor and the role the manager should play in a global outsourcing context.

Keywords: Global IT | IT Outsourcing | Relationship Management | Management Strategies | Influence Factors | Critical Factors

Article:

INTRODUCTION

Most of the extant literature on information technology outsourcing deals with outsourcing within national boundaries (domestic outsourcing). It is only recently that many firms have begun to look at global IT outsourcing as a more profitable venture than domestic outsourcing. We define global IT outsourcing as any contribution to a client organization by one or more external vendors with a different country of origin in tangible, intangible, human, and/or nonhuman resources related to the IT infrastructure. Like domestic outsourcing, global IT outsourcing is also driven by transaction cost economies in terms of personnel (there is a significant disparity in cost of labor among developing and underdeveloped countries), skill (more efficient programmers at a cheaper cost), and productivity (more productive as compared to internal development). But unlike domestic outsourcing, a firm may decide to globally outsource part or all of its IT infrastructure for reasons other than that of cost. For example, a firm in a one country may decide to tie in with a vendor in another country so as to facilitate its product entry into that country. Or, it may opt to globally outsource some of its IT so as to gain access to new market opportunities (Heeks. 1996) andlor as an option for developing a global information system (Apte & Winniford, 1991). More recently, firms are forming alliances with offshore outsourcing firms so as to add value to their competencies irrespective of the cost of the alliance.

Key reasons for the phenomenal increase in global information systems outsourcing are the current economic situation and the tremendous advances in telecommunications technology. On the supplier side, outsourcing provides financial stability to vendors through long-term partnerships and increased revenue. And on the buyer side firms are using outsourcing as a scalable solution that can be right-sized easily depending on their changing needs. Also, technological breakthroughs have allowed geographic boundaries to become blurred and has encouraged firms to seek resources from locations that provide the best competitive advantage. Some of the key factors influencing the choice of global information systems outsourcing have been lower cost, inability to hire and retain qualified personnel in the home country, and the increased emphasis on speed, vis-a-vis the time from project initiation to system installation (Patane and Jurison, 1994). In case of software development, an additional incentive for firms to globally outsource (to developing countries like India) is the high salaries and overhead cost in the industrialized nations.

The topic of IT outsourcing management is a relatively unexplored area within the global outsourcing research community. Nevertheless, both researchers as well as practitioners agree that outsourcing management is one of the most critical factors contributing to the success of an outsourcing deal. Unfortunately, the adage, "If at first you don't succeed, try again," is not the most effective way of achieving the goals and creating a successful relationship in a global outsourcing scenario.

This article puts in perspective the key areas to be considered if a firm wants to create a successful relationship with its global outsourcing vendor. We first take a look at some of the key research done in the outsourcing area, both on the domestic and the international front. Then we look at some key factors that determine the success of a global IT outsourcing relationship. Finally, we examine results of a survey conducted on the topic and two case studies in light of the concepts presented in the article.

A REVIEW OF IT OUTSOURCING

Managing an outsourcing relationship, especially an offshore one is not an easy task. Simple misunderstandings can make even a well-laid out contract get into a dysfunctional relationship. As mentioned earlier, the literature related to global IT outsourcing management (GITOM) is not very extensive. Nevertheless, a study of past research in domestic and global IT outsourcing in general can serve as a point of reference and give us a better perspective in understanding the issues related to managing an outsourcing relationship with a foreign vendor. The following highlights some of the key research and studies undertaken in the area of domestic and global IT outsourcing.

IT Outsourcing

In recent times, IT outsourcing has gained increased prominence, both among academics and practitioners, due to the many high profile multi-million dollar cases involving "respectable" firms. There is a vast amount of research on domestic IT outsourcing dealing with a host of issues like reasons for outsourcing, selection of an outsourcing vendor, consequences of outsourcing, risks involved in information systems outsourcing, and the importance of a good contract. Since the focus of this paper is on global IT outsourcing relationships, only some of the recent key studies in domestic IT outsourcing are summarized below.

General Issues/ Risk in outsourcing	Outsourcing policies /Performance impact	Outsourcing Relationships
Nelson et.al. (1996) Cash et.al. (1992) Benko (1993) Palvia (1995) Gurbaxani (1996) Loh & Venkatraman (1992a,b)	Malhotra (1995) Lacity et al. (1995) Gupta & Govindarajan (1986)	Nam et. Al (1996) Guterl (1996) McFarlan & Nolan (1995)

The conclusions from these studies emphasize the need for careful planning and implementation of the outsourcing arrangement in order to reap significant benefits. When the firm is involved with outsourcing vendors based outside of the United States, they have to develop a very different strategic and organizational outlook than firms involved only in domestic sourcing. Since different cultures communicate distinctively with respect to IT management (Sauter, 1992; Ein-dor et al. 1993), it is imperative that one look at these differences when considering a global outsourcing arrangement (in addition to the traditional issues like cost, vendor competency, technology etc.). To say that these cultural differences play a critical role in the success of the relationship is an understatement, as is supported by the fact that many firms looking into offshore outsourcing are depending on vendors with cultural specialists in particular countries. From a reference point of view, some key studies in the area of global IT outsourcing are enumerated below.

General Issues /Risks	Managerial Considerations	Contracts /Relationships
Patane and Jurison (1994) Willcocks et.al (1995) Heywood (1994)	Apte and Winniford (1991) McFarlan (1995)	Sharland (1993) Heeks (1996) Davis (1992) Pastore (1996) Klepper (1995)

Further reading in the area of global IT outsourcing suggests that there is a scarcity of information and studies in the area of (global) outsourcing relationships and their management. This article addresses this issue and gives a better understanding of the key principles that are required and the different management styles that could be used by executives in creating a successful relationship with their global IT vendor. In order to achieve this, the remainder of this article focuses on the key elements in managing a global IT outsourcing relationship successfully, the issues and problems facing firms involved in global IT outsourcing, and the best management strategies under different outsourcing scenarios.

A RESEARCH FRAMEWORK

The following research framework is presented so as to gain a better understanding of the outsourcing management process and to put a perspective on the different components involved while managing an outsourcing relationship.

The GITOM framework has four major components: influence factors which represents the various issues and problems that affect the relationship management in an outsourcing arrangement; management strategies, which includes the combination of one or more management elements; moderating factors, conditions or characteristics in a relationship that changes the 'normal' management style (e.g., age of the partnership, client attributes, vendor attributes) and is highly contextual; and lastly performance implications (e.g., effectiveness, efficiency, commitment), which are nothing but the dimensions by which the client management and the vendor firm agrees on to judge the success of their relationship. The article focuses primarily on the issues pertaining to or affecting global IT outsourcing management strategy and the primary elements which composes that strategy.

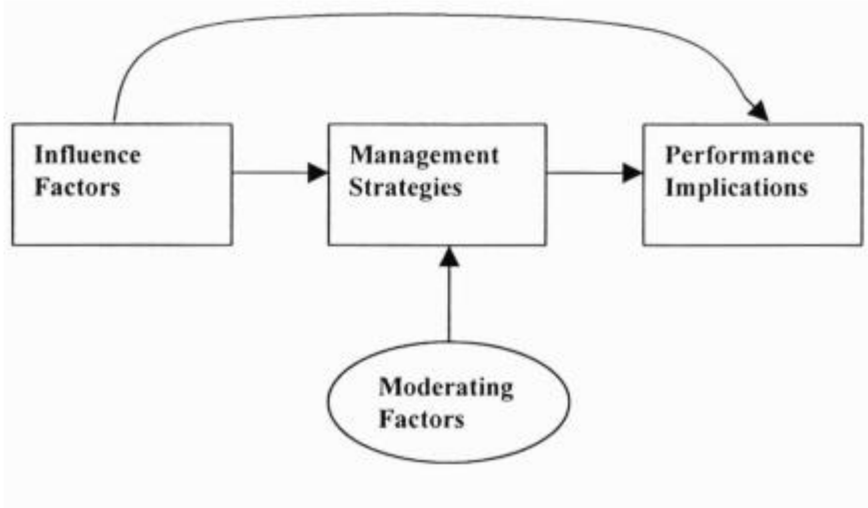

Figure 1: The GITOM Framework

ELEMENTS OF MANAGEMENT STRATEGY

Relationship management is a complex task. And when the players involved are from different cultures as in global IT outsourcing, the task of managing the relationship becomes even more difficult. To get a fundamental understanding of this process, and to do a better job of management, it is imperative that one understands the underlying dimensions and elements that make up the overall management strategy. Based on the broader literature on firm-subunit relationships (Doz et al. 1990, Gupta & Govindarajan, 1991), the managerial concepts for global IT outsourcing incorporate structural variables (Control Mechanisms, Integrative Mechanisms, and Contract Mechanisms), compensation variables (Incentive mechanisms), and process variables (Communication Mechanisms, Conflict Resolution Mechanisms). This section provides a review of the following elements relevant to the domain of global IT outsourcing management.

Control Mechanisms

"The purpose of control is to minimize idiosyncratic behavior and to hold individuals or groups to enunciated policy, thus making performance predictable" (Tannenbaum 1968, p 3). Broadly speaking, two categories of control mechanisms can be identified in the literature --formal and informal (Jaworski, 1988). In formal control, written, management established mechanisms are set down to influence the desired party so as to achieve a desired outcome, where as in informal control, the mechanisms are less rigid, unwritten, and typically worker-established (Jaworski, 1988). Formal control can further be classified into two groups - outcome control and behavior (process) control. Gupta and Govindarajan (1991, pp782) expressed these terms as follows: "Outcome control can be defined as reliance only on the end results for assessing a subsidiary manager's performance, whereas behavior (process) control can be defined as reliance on surveillance over the manager's decisions and actions that are expected to produce the hoped-for end results." Output control gives the organizational members the flexibility to choose any means to achieve a desired outcome. Behavior control, on the other hand, is more restrictive than output control and imposes on the members specific constraints with regards to the task at hand.

An example of formal control is the bureaucratic control system. In a bureaucratic system, control is established with the help of explicit rules and regulations which specify the desired performance in terms of output and/or behavior (Baliga and Jaeger, 1984). As a result, performance evaluation in this type of control involves comparing the member's behavior and output to a pre-established standard. Training and socialization in this type of control is fairly straightforward and simple. New members are indoctrinated about the rules and regulations in the organization.

An alternative to bureaucratic control is a cultural control system wherein control is established through informal and implicit mechanisms (Baliga and Jaeger, 1984). In a cultural control system, the shared values and beliefs within an organization guide the norms and behavior of the personnel in that organization. This type of control can be found in organizations with low turnover and a strong 'organizational culture' where the employees have accepted the 'company way' of doing things. Practices like long-term employment guarantees and consensual decision making aid the implementation of a cultural control system by providing the members with stability in a cultural group and interaction to assimilate and share the cultural values. Training and socialization in a cultural control setting is more critical and extensive than in the bureaucratic control system. In addition to the rules and regulations, a member must also absorb and accept the 'subtle' and complex control system which is based on a range of 'essential' values (Baliga and Jaeger, 1984). Performance evaluation in a cultural control system is done through interpersonal interactions.

Within the context of global IT outsourcing, control mechanisms are needed so as to monitor the performance of the vendor and to achieve a successful outsourcing partnership with the vendor. In short, these strategies refer to the amount and type of "power" the client can execute on the vendor. The type of control mechanisms which need to be established will vary from client to client depending on the environmental and contextual factors specific to the firm-dyad relationship. Vendors from certain nationalities would react to certain control mechanisms more favorably than others. The type of control mechanisms suited for a particular global IT outsourcing partnership is also dependent on the attributes of the outsourced IT and the cultural differences between the client and the vendor organizations.

Inter-organizational Coordination

When two firms enter into a cooperative relationship, the issue of coordination plays an important role in the performance of that venture. In any outsourcing relationship, coordination between the client and the vendor is a must for the success of that relationship. The emphasis here is more on the degree of coordination rather than the actual mechanism of coordination itself. Coordination between any two parties can be conceptualized in terms of two dimensions--the breadth of coordination (number of parties involved in the coordination network), and the diversity of coordination (the number of functions coordinated). Extending to the global IT outsourcing scenario, the amount of coordination required between the client firm and the outsourcing vendor will depend on the "volume" of IT outsourced and the extent of vendor involvement (Nam et a]., 1996).

Past research (Galbraith, 1977) has identified several key formal structural mechanisms for coordination between subunits in an organization. The least complex of these integrative mechanisms are liaison positions, and the most complex type is matrix structure. Between these two extremes we have two other type of integrative mechanisms, namely cross-unit committees and integrator roles. The more complex the integrative mechanism, the more effective the firm-dyad will be in processing information and in coordinating the activities between interdependent units. On the other hand, the more complex the mechanism is, the more costly it is to implement such a mechanism.

To summarize, the 'coordination' element of management strategy refers to the degree of integration between the client firm and a vendor firm in a global IT outsourcing context. The more sophisticated the coordination mechanism between the vendor and the client, the more efficient the ability to process and exchange information. The degree of coordination will also be affected by the attributes of transaction in the outsourcing relationship.

For the successful management of any outsourcing relationship, the client firm should first look at what is being outsourced, how critical is the outsourced IT to the rest of the firm's operations, and what impact does the outsourced IT have on the success of the firm in the market place before it decides on a coordinating mechanism.

Contract Specificity

One of the basic requirements of a good outsourcing partnership is a good contract. The "science of the contract" plays an important role in determining the success of an outsourcing deal (Pastore, 1996). As one trade journal puts it, "The key to managing the outsourcing vendor is the contract. The contract establishes, among other things, the cost for processing at various levels of use, specifies the acceptable performance parameters, provides penalties for substandard performance and details the terms under which the relationship can be terminated" (Computerworld, January 8, 1990: p72). When the outsourcing deal involves a vendor from another country, it becomes even more imperative that certain amount of flexibility be built into the contract to handle future contingencies. Contingent clauses built into the contract would come into effect under certain mutually agreed upon 'parameter changes'. Even under relatively 'stable' conditions, incomplete contracts are a useful tool for the management of a global IT outsourcing relationship. As Doz, Prahalad, and Hamel (1990, pp143) puts it, "... over time partners are likely to develop a better mutual understanding, a more realistic assessment of the potential value of their contribution, of the conditions needed for value creation, a greater appreciation of each other's modus operandi and cultures, as well as (hopefully) more trust. This may usefully lead them to renegotiate their agreements to improve effectiveness over time." In short, the degree of contract specificity could affect the outcome and success of a global outsourcing deal over time

The 'contract specificity' element of the global IT outsourcing management strategy helps the client in deciding when to have a highly specific contract and when the contract can be less comprehensive without undue risk or loss to the firm. In other words, it aids the client firm in making a decision on the amount of flexibility that should be built into the contract during renegotiation or modification of the original contract.

Collaborative Communication.

The intensity of communication between any two organizations can be conceptualized in terms of four dimensions: frequency, informality, openness, and the density (bidirectionality) of communication. The density of communication was defmed by Gupta & Govindarajan (1991) as "the number of people in the two units who interact with each other across organizational boundaries." It has been found that increased levels of these dimensions are associated with increased commitment, satisfaction, and coordination. Also establishing good collaborative communication channels creates an atmosphere of mutual support and respect, which in turn impact the success of the partnership.

On another level, the choice of a particular communication channel in a global IT outsourcing relationship would depend on the nature of the outsourced IT and the environmental contexts surrounding that partnership (Spee, 1994). In their study, Daft and Lengel (1986) clarified the difference between the amount of information transmitted through a medium and the medium's richness. They also argued that the under conditions of high uncertainty, the amount of information transmitted would be high; and under conditions of high equivocality, the media should be rich enough to facilitate debate and clarification (Daft and Lengel, 1986). It has also been suggested that situational factors, symbolic considerations and social influence play a role in the selection of a particular medium for communication (Markus 1992, cited in Spee 1994).

Essentially, the 'communication' element of the global IT outsourcing management strategy represents the type and quality of communication channels which need to be established between the vendor and the client. Certain outsourcing contexts call for establishing a very informal and open communication channels between many people from both the client and the vendor firms. On the other hand, for certain outsourcing scenarios, a one person formal link between the client and the vendor is enough. Proper management of communication between the client and the vendor would enhance the performance of the outsourcing relationship

Conflict Management

Since global IT outsourcing involves players from different organizations and nationality, it is almost inevitable that conflicts would arise during the course of the relationship. It has been stipulated that when decisions are made by a 'coalition', the coalition members may differ in the interpretation of a given situation, and may pursue different priorities, which in turn results in conflicts regarding the importance of various factors (Ungson et al. 1981). The nature and structure of conflicts (negotiation problem) and its resolution would very much depend on the specific outsourcing context in terms of the level of interdependency and the environmental attributes. In many instances, negotiations during conflict resolution often end in 'suboptimal' agreements (Mumpower 1991). As Raiffa (1982) puts it, "Often, disputants fail to reach an agreement when, in fact, a compromise does exist that could be to the advantage of all concerned. And the agreements they do make are frequently inefficient: they could have made others that they all would have preferred" (p.358).

With regards to global IT outsourcing relationships, conflict management strategies are devised for those cases where the "...individuals are in conflict because they want different things, but must settle for the same thing" (Mumpower 1991, p. 1305). Within the context of a global IT outsourcing partnership, the problem of conflict management is compounded because the level of 'importance' placed by the client and the vendor on a particular issue may differ considerably (Clark, 1993). It is also contended that because of the 'global' nature of the client-vendor relationship, optimal conflict management strategies would vary from vendor to vendor. For example, it has been suggested that for transactions which are low on assetspecificity, non-relational conflict resolution modes, such as switching and litigation, would be more efficient than other conflict resolution modes (Spee, 1994). This is because, under conditions of low asset-specificity, neither parties are inclined to be committed to each other. On the other hand, when asset specificity is high, the service provider (vendor) has a vested interest in the transaction and conflict resolution is better achieved by relational conflict resolution modes, such as appeals to shared values and internal hierarchy (Speer 1994).

On another dimension, two general strategies of concession can be identified to solve conflicts arising from an outsourcing relationship. The first strategy, compromise, involves both the parties agreeing to position intermediate between each other's initial bargaining positions for a particular issue under consideration. The second strategy, horse trading or logrolling, consists of each party agreeing to trade-offs such that each party gets what they want on certain issues (Mumpower, 1991; Forman and Cohen, 1970).

To summarize, since global IT outsourcing arrangement calls for a 'coalition' between two parties with different nationalities, it is inevitable that certain conflicts may arise during the course of the partnership. These disagreements may manifest themselves in the form of "conflict of interest" (the client and the vendor do not agree on the preferred outcome from doing a particular task), 'conflict of understanding' (where in the client and the vendor disagree over the optimal way to approach a problem or to attain a shared goal), and/or 'conflicting ideologies' (the client and the vendor have a clash of ideologies resulting from national and organizational differences) (Druckman, 1993). Conflict management strategies are needed to facilitate the resolution of these conflicts if sustainable benefits are to be obtained from the outsourcing relationship. The type of conflict resolution strategies employed would depend on situational factors like the nature of the conflict, cultural background of the conflicting parties and the level of conflict.

INFLUENCE FACTORS IN MANAGING GLOBAL IT OUTSOURCING RELATIONSHIPS

There are a variety of issues and factors that has a direct impact on how the aforesaid management elements are combined to makeup a global IT outsourcing management strategy. These issues are highly contextual both from a intra and inter firm point of view, and any client firm would do well to study them carefully before deciding on how to manage their global IT vendor.

1. A key issue is whether the IT being outsourced plays a central role in the core strategy of the firm. The strategic impact of the outsourced IT to the client firm's operation and success would

shape its managerial response in terms of the nature of interorganizational relationship with the vendor firm. Another issue the client firm should determine is the degree of criticality of the outsourced IT vis-a-vis the operation and success of the organization. The criticality of the outsourced IT would determine the degree of control and delegation to be exercised in an outsourcing relationship (Ang, 1993).

2. Technological uncertainty is another key problem facing the managers in a global IT outsourcing relationship (Ang, 1993). In an IT outsourcing arrangement, uncertainty could result from human actions such as strategic nondisclosure, disguise, or distortion of information (Loh, 1993; Williamson, 1986). As a result of such uncertainty, one of the parties in the exchange would be tempted to act in an opportunistic manner. Another form of uncertainty pertains to the technology being outsourced. First, there is the issue dealing with the kind of technology being used to fulfill the contract: is it state of the art, is it going to become obsolete in the next couple of years, is it difficult to maintain and troubleshoot, etc.? Also, specification adjustments are needed as new technological developments take place. Technological uncertainty becomes especially acute in the case of emerging technologies.

3. Another factor affecting the choice of a particular management strategy is the degree of functional complexity in the outsourced IT. Ang (1993, pp40) refers to functional complexity as "the difficulty of coordinating an increasing number of differentiated yet interrelated activities in IS services." The major activities associated with IS services include: developing an IS strategy, IT planning, capacity management, production management, human resource management, security management, PC management, and network management (Cash et al. 1988; Ang 1993). Sometimes, the clients run a variety of software applications on geographically dispersed platforms using different computer configurations. The complexity of the outsourced IT brings in additional issues to be considered while devising a successful global IT management strategy.

4. One issue which has a direct impact on the 'control' and 'coordination' element of the global IT outsourcing management strategy is the procedural knowledge, which refers to "the degree to which the task activities can be defined or to which cause-effect knowledge is clear" (Ramaswami 1996). Procedural knowledge is high for those IT applications that are routine, clear, and where the information requirements are unambiguous (Leifer and Mills 1996). The level of procedural knowledge in an outsourcing relationship can also be viewed in terms of the uncertainty and equivocality present in the 'task' performed by the vendor. Uncertainty has been defined as "the difference between the amount of information required to perform the task and the amount of information already possessed by the organization" (Galbraith 1977). Equivocality, on the other hand, implies the presence of multiple and conflicting interpretations. Outsourcing contexts with a high level of procedural knowledge can be said to have high information certainty and low equivocality (Leifer and Mills 1996).

5. In a global IT outsourcing scenario, asset specificity becomes a major cause of concern when managing the outsourcing relationship. Whether it is technological resource specificity (explicit usage of hardware, software, communication architechtures etc) or human resource specificity (unique experience, knowledge, and skills the vendor has), the client firm has to incorporate certain elements into their management strategy so that the vendor does not take undue

advantage of the situation and also so that they don't have to be exclusively be dependent on the 'good-faith behavior' of the vendor.

6. One of the major issues faced by the client firm in managing a global IT outsourcing relationship is the difference in culture between their firm and the vendor firm. Since the outsourcing arrangement involves a difference in the country of origin of the vendor and the client, cultural differences assume a very crucial role in the management of the outsourcing relationship. A very good grasp of the cultural differences between different countries can be learnt by looking at the dimensions put forth by Hofstede (1980). In his study, Hofstede delineated the cultural variations between nations along four dimensions: individualism, power distance, uncertainty avoidance, and masculinity.

7. And lastly, the degree of interdependency between the client and the vendor firm could pose a problem for the client firm if not managed properly. Depending on whether the interdependency (Thompson, 1967) is pooled (the client and the vendor firms share common resources but are otherwise autonomous), sequential (the 'output' of the vendor firm is used as an input by the client organization), or reciprocal (both the client and the vendor organizations use each other's 'output' for their operation), the management of .the global IT outsourcing relationship becomes more involved and complicated.

EVIDENCE AND RESULTS

To determine some of the issues in global IT outsourcing, and to learn about the different management strategies used by managers in successfully managing their outsourcing relationships, a study was conducted of IS managers in a select group of fifty firms involved in global IT outsourcing. The study included a survey. The breakdown of responses in various key categories are as follows:

Category	Responses (%)
Changes in Contract	80% responded 'No change' for the duration of the contract 30% responded 'Increased Scope'
Joint Planning	60% responded 'Significant Joint Action' for methods used in performing outsourced activities. 90% responded 'No Joint Action' for forecasting technological trends as related to the outsourced activity.
Frequency of Communication	20% did monthly reporting 50% had ad-hoc reporting (as needed) 10% had daily reporting
Working Relationship	70% had frequent group meetings with their offshore vendor 20% trusted their vendor to do the right thing. 40% had unresolved conflicts in their working relationshipo 90% had their vendors prepare status reports

Other qualitative results and implications from this study are summarized below

1. There was a direct relationship between the age of the partnership and the scope of the outsourcing contract. This suggests that the longer a client firm has been dealing with a particular global vendor, the more the degree of mutual trust they developed in each other. This in turn motivated the client firm to outsource more of their IT activities to that particular vendor. Also, the longer the working relationship between the client and the vendor firms, the more stable the 'understanding' they have in terms of management expectations and performance.

2. Among a variety of attributes and factors offered as the reason for choosing a particular global IT outsourcing vendor, most firms picked 'competitive pricing' and 'Similarities in corporate culture' as the two most important factors. This should not come as a surprise as the closer the global vendor is to the client firm in terms of culture, the more easily can the client firm identify with and manage the outsourcing relationship.

3. Contrary to what was expected, many firms with a sophisticated software portfolio and different hardware platforms had insignificant monitoring systems in place to monitor their vendor's performance. At first this came as a surprise, but then it was attributed to the fact that the global IT vendor had much more expertise in these 'state-of-the-art' technologies than the client firm, and the client firms were happy to just concentrate on their core businesses and give the vendor the flexibility to do as they see fit (with respect to the outsourced activity). This was further confirmed by the fact that many clients let their vendors do the forecasting when it came to 'technological trends' vis-a-vis the outsourced function. It is also interesting to note here that some firms' decision to 'stay way' was partly because of the differences in culture between their firm and their global vendor.

4. Firms outsourcing strategic applications had very formal communication channels and explicit control mechanisms established with their global vendors. This in line with the fact that strategic applications drive the core business of the client firm and thus the client firms were less willing to give the vendor complete autonomy in their activities. Also, formal communication channels and explicit contracts reduced the chances of any misunderstanding later on in the relationship.

5. Firms who successfully managed their relationship with global vendors from "collectivistic" culture countries (e.g., India) had a lot of flexibility built into their control and monitoring mechanisms. Global vendors from these countries were more accepting of the client firm's values and philosophies and were more willing to accept changes. In turn the client firms were more flexible in how these firms were monitored in terms of their tasks and performance.

6. It came as no big surprise that many client firms who had outsourced their IT applications to vendor from countries with a culture distinctly different from theirs had an outcome based control mechanism in place to manage the relationship. This is understandable since an outcome based control eliminated the need for extensive interaction with the vendor firm and thus reduced the chances of any misunderstandings.

7. In cases where the outcomes were not readily measurable (low performance documentation), client firms used a process control approach to measure the vendor performance and maintain a successful outsourcing relationship. By constraining and 'measuring' the subtasks involved in the

outsourcing application, the client firm eliminated the trouble of keeping up with rapidly changing technology or changing standards.

Next, we present two case studies and apply our research framework to develop insights into global IT outsourcing management.

Citicorp Development Center and i-flex solutions limited[1]

http://www.outsourcing-research.com/banners/everest/offshoreisnotoffhand.pdf

Offshore outsourcing proponents often tout the differences in time zones between the two parties as a highly beneficial arrangement that facilitates time to market. Marketing teams present the 12-hour time difference between India and California or the eight-hour difference from New York to Russia, for example, as a means of obtaining 24-hour work crews on development projects or 2417 coverage for support projects.

The outsourcing arrangement in this case study highlights what can happen when there are time zone and distance factors impacting the relationship.

Background Situation: Citicorp Development Center, a business unit of Citigroup, developed and produces a home banking software product ("Direct Access"), together with middleware that allows the product to integrate with all the front-end systems and mainframe systems throughout the Citigroup consumer businesses worldwide.

Because the Japanese marketplace has unique complexities from differences in coding for language characters as well as banking business requirements and offerings, Citicorp decided to outsource the application development and system integration of its Direct Access product for Citibank Japan. The decision to outsource was based on the need to ramp up quickly to meet the requirements of Citibank Japan, not allowing Citicorp enough time to find and recruit full-time employees with the right skill sets.

i-flex solutions limited was selected to handle the Citicorp projects because the outsourcer had staff on board with the requisite skills and also presented a compelling economic structure during the vendor evaluation process.

Time Zone Factors: The parties began experiencing problems as soon as they started transitioning the work to the offshore outsourcer. Steve Saussy, Citicorp Development Center's product manager, says the problems were overcome only through teamwork efforts from both parties. The i-flex team is located in Mumbai (formerly known as Bombay), India. When it's 5:00 P.M. at Citicorp, it's 5:30 A.M. in Mumbai. "If we want to talk to them, we have to call them before they leave for work or after they get to work," explains Saussy, "and it takes most of them about an hour to an hour and a half to get to work. So we either have to stay up really late to catch them when they get in first thing, or we have to get up really early in the morning to talk to them at the end of their day." This limited window of time for communications means there must be minimal mistakes, for each mistake can cost a day's time.

In theory, Citicorp saw the offshore outsourcing as a way to achieve a 24-hour continuous development cycle. The people at i-flex would work their 12-hour day, and then they would hand off the project to Citicorp people who would plug it into their platform, finalize it and get it ready to ship to Japan, and then tell the i-flex team to send the next increment. In reality, there are problems if, for example, an i-flex worker hands off software via the server to Citicorp and, upon downloading, the Citicorp worker discovers it's missing a file. If the two teams are working side-by-side in the same time zone, that takes five minutes to resolve. Similarly, a 12-hour time difference can cause the parties to lose a day of production if a requirements document doesn't arrive when expected by the offshore team. The team members 12,000 miles away can spend a day sitting there twiddling their thumbs while waiting for the requirements.

Citicorp and i-flex worked through their time zone difficulties by taking a teamwork approach and ensuring that there were people on both sides of the world who were willing to get up early and stay up late. Building a good relationship among management of both teams is also crucial. Saussy says a buyer organization must build a relationship with its outsourcer so that the offshore team will let the onshore team know something has happened that may cause people to be idle and get behind schedule or otherwise run up the tab.

Citicorp's theory in using an offshore team as a strategy to get 24-hour development cycles was not misplaced. However, management controls need to be put in place upfront to overcome the obstacles in making sure that happens.

Analysis: We see from the above Case study that the outsourcing relationship between Citicorp and I-flex would not have been successful if both firms had not realized the key influence factors driving the success of their relationship and if they had failed to take appropriate corrective measures. In this case, control was one of the key issues: Citicorp had to know what the offshore team is doing and to make sure that there are strict quality checks in place (necessary especially if you are working on a tight timeline). Another success factor in this relationship was interorganizational coordination and collaborative communication. To really leverage the time-difference and create a profitable alliance, Citicorp had to make sure that there are robust coordination mechanisms in place between their team and the offshore team. This is necessary to ensure a smooth hand-off and to avoid any rework that would negate the 2417 coverage effect. Part of the success also depended on having an open communication channel, including giving the offshore team remote access to the buyer's network and software archives.

Case Study: Duty-Free Shop Group and Cognizant Technology Solutions

In any outsourcing relationship, there must be a concerted effort from both parties at the outset to build a new culture. They must understand how each company normally operates in such matters as proactive or reactive approaches; their decision-making processes; and the speed, flexibility and aggressive attitude toward escalating solutions to unexpected challenges. Adding language nuances, national differences in mannerisms and relationship approaches can inherently make an offshore outsourcing arrangement even more challenging.

Recognizing these potential issues, some companies are taking a more prudent approach toward working with an offshore outsourcer to minimize risks in cultural difficulties. This case study is an example of such a careful approach: starting with small projects and making sure things work well before ramping up.

Background Situation: Duty-Free Shop Group operates airport stores and off-airport stores in travel destinations. Located in Hawaii, Mid Pacific, Guam and Sai Pan, Asia, Singapore, Hong Kong, Malaysia, Korea, Sydney, and airport shops in throughout the continental U.S., Duty-Free sells liquor, tobacco and fragrance and luxury-brand items to travelers. Duty-Free's core expertise involves managing its supply chain from the manufacturer to the point where travelers purchase goods. In 1999, with 15 years old legacy systems that were complex to maintain, the company faced major investments in bringing its IT staff skills up to world class level in order to achieve faster, higher-quality support services with lower operating costs. It chose, instead, to partner with an outsourcer with IT expertise.

Ron Glickman, Duty-Free's vice president of Information Technology, says his company looked at outsourcers in the emerging market of Eastern Europe but moved on because of political instabilities. Ireland and European outsourcers didn't present the long-term cost advantages. Their due diligence convinced them that India was a more mature market with significant market competition. Cognizant was selected because of its outstanding research and development capabilities and because it demonstrated flexibility and a willingness to change if things weren't working well.

Strategy of Starting Slow: They started by outsourcing the production support process to Cognizant, which uses an onshore/offshore model. At the outset, Duty-Free carved out only a small piece of its system, minimizing risks while giving the supplier the opportunity to prove it could make beneficial changes. Once the kinks were worked out, they moved to phase two, referred to as "Follow the Sun" support. In this phase, the supplier began taking production support calls from the data center and business users. The next step was a full-blown support agreement, turning over responsibility for maintenance and enhancements of Duty-Free's legacy systems around the world. Support services for systems and applications in Duty-Free's data centers in North American, Hawaii, Mid-Pacific, Asia, and Oceania regions are now consolidated at Cognizant in India.

The progression in services has been accompanied by a progression in pricing structure. The parties began working together under a series of 90-day agreements as they learned about each other and experimented with the best ways to make their relationship work. For a year and a half, each new project or new phase of expanded services was handled with a separate work order under the umbrella master agreement signed in May 2000. Once the complete responsibility for support and maintenance was ready to be turned over to Cognizant, they signed a letter of intent in August 2001 for a new three-year agreement. The new outsourcing agreement includes gainsharing incentives for the supplier to reduce Duty-Free's seven million lines of code and number of programs.

Flexibility: Duty-Free's best practice of steady progression of increasing supplier responsibility seemed to work well. Duty- Free learned the value of having selected a supplier willing to be flexible and make changes. Glickman explains, "We found that the onshore resources were not as effective working with our business partners as we had hoped. So we sat down with Cognizant and talked to them about that, and two things happened. They changed some of the people. Also we took more responsibility for the relationship and focused Cognizant more on the offshore components of technical delivery, which is their expertise. So we basically adapted the onshore/offshore model to work better in our environment. They are also good at bringing teams on demand to look at new technology opportunities for our new retail ideas. For instance, we are building a new store that will have plasma screens and video in the screens with content to attract customers to particular brands or products. So we brought Cognizant to help us look at what we can to do from a technology side to make that work."

Duty-Free believes the first key to success in offshore outsourcing is to perform due diligence to ensure the supplier selected is the right partner for the long term and is capable of bending to meet the buyer's special needs.

Analysis: This case study shows the importance of culture and the need for proper conflict management in a global outsourcing relationship. Given that the buyer and the vendor are from two different countries, it is almost inevitable that certain challenging differences can arise during the course of the partnership. Duty-Free handled the situation well with their relationship with Cognizant by starting off with small projects while they "learned" the social and corporate culture of the offshore vendor firm. The other aspect of this relationship was that the agreement between Duty-Free and Cognizant included gainsharing incentives that sewed as motivators to resolve conflicts faster and move along. Once the buyer firm has gone through various stages of testing and feels very comfortable with the culture of their offshore vendor, they can scale the 'pilot' project to include other significant processes. This ensures that when the relative magnitude (both in terms of dollars and size) of the outsourcing projects increases, the errors and pitfalls are reduced to a minimum.

CONCLUSIONS

In conclusion, outsourcing is a great strategy for a number of reasons, provided the decision is arrived through a well-thought out process. Whether it is traditional outsourcing of simple IT processes, or the outsourcing of entire infrastructures through Netsourcing, a client can benefit from following a certain set of guidelines. Listed below are a few key areas which should be considered by an organization before they delve into any form of outsourcing.

1. Define precisely what you want to outsource. Are you planning to outsource IT staffing, or the entire IT and network infrastructure. Or maybe you only want to outsource the database maintenance part of your business. This step is critical as your needs and goals as to what you want outsourced has a direct bearing on who and what kind of outsourcing provider you will be looking for.

2. Do your homework when selecting an outsourcer. This is specially true in areas like ASP outsourcing as the entire ASP market is relatively new and unstable. Check on attributes like: are they publicly traded; are they listed on any exchanges; do they have staying power etc.

3. Select an outsourcing provider that can grow with you and can scale their services easily as your business flourishes.

4. Have clear metrics or Service Level Agreements (SLA) and process boundaries that would define a successful relationship with your Outsourcing provider.

5. Study the provider's business model and have contracts that would contribute to mutual profitability.

6. If possible, have the outsourcing provider assign one empowered 'Project Manager' responsible for all activities vis-21-vis the outsourced area. This ensures responsibility on the part of the provider and also establishes a feedback path between the company and the outsourcing provider.

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