The Handbook of Global Outsourcing and Offshoring

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Introduction

By end of 2009, Information Technology outsourcing (ITO) revenues exceeded US$ 250 billion while those for Business Process outsourcing (BPO) were more than US$ 140 billion. The revenues from offshore outsourcing of business and Information Technology (IT) services exceeded US$ 60 billion, and over the next five years the compound annual growth rate for offshore outsourcing is expected to be about 20%. By 2006, over 200 firms from the Forbes 2000 companies and nearly 50% of the Fortune Global 250 had offshored IT and business process activities. In 2008 India posted some 65% of the ITO and 43% of the BPO market (Willcocks and Lacity, 2009). It is common to talk of Brazil, Russia, India and China as the BRIC inheritors of globalization, offering both offshore IT and back-office services, and also, with their vast populations and developing economies, huge potential markets. In 2008 India exported US$ 40 billion of such services, while China, Russia, and Brazil managed US$ 5 billion, US$ 3.65 billion, and US$ 800 million respectively. But the phenomenon of offshoring and offshore outsourcing is certainly expanding, with, on our count, some 120 centers developing around the world. Therefore it has become increasingly important to understand the phenomenon, not least as a basis for suggesting what directions it will take, its impacts, how it has been conducted, and how its management can be better facilitated.

These points are particularly pertinent because recent evidence has suggested that a number of offshore outsourcing relationships and offshoring projects have failed to live up to some of their promises. The reasons for this are many, ranging from poor quality delivered by vendors to rising management costs that result in frustration and disappointment. Collaboration between remote sites and the ability to share and transfer knowledge between dispersed teams have also been mentioned as imperative to successful offshore outsourcing projects. In addition, our own research highlights certain capabilities that vendors and clients should develop, the governing structures that they need to put in place, and the bonding activities that they need to promote and make time for. While offshore outsourcing brings its own distinctive issues, it is the case that the principles for running any ITO/BPO venture also continue to apply to offshoring and offshore outsourcing arrangements. However, offshoring is increasingly part of most deals of any significant size, so it becomes very necessary to see and manage outsourcing within a global context.

The main objectives of this book

Therefore, this book offers a broad perspective on various issues relating to the sourcing of systems and business processes in a national and global context. The key objectives of the book are to:

1. assess the impacts of global sourcing on business;
2. assess the risks and benefits for the firm from engaging in sourcing activities;
3. devise a plan to outsource a system or a process from a client viewpoint;
4. devise a plan to offer services from a vendor viewpoint;
5. ensure sustainability over the lifecycle of an outsourcing relationship;
6. raise awareness to recent developments in the global sourcing arena.

This book will, therefore, examine both the client's and the vendor's involvement in sourcing relationships by emphasizing not only the capabilities that each side should develop prior to entering a relationship but also what they should develop as a result of their interactions with each other.

Key definition: Sourcing

The field of sourcing is replete with jargon and acronyms. For example, the term "bestshoring" has become one of the recent "buzz" words which, while widely used by managers, are poorly defined by the professional press and academic publications. Even more worrying is the inaccurate use of the terms "outsourcing" and "offshoring" by both managers and academics. These terms and others will be defined in Chapter 1. Here we wish to explain what we mean by the term *sourcing.*

> *Sourcing is the act through which work is contracted or delegated to an external or internal entity that could be physically located anywhere. Sourcing encompasses various in-sourcing and outsourcing arrangements such as offshore outsourcing, captive offshoring, nearshoring and onshoring.*

Clearly, almost any firm is somehow engaged in sourcing activities; however, each of these firms applies a sourcing arrangement that suits its particular needs.

The structure of the book

The book is organized into 10 chapters to address the aims outlined above. We distinguish three key sections in this book. Chapters 1–3 are about *making a sourcing decision*. Chapters 4–6 are about *building sourcing competencies,* and Chapters 7–10 are about *managing sourcing relationships*. Some chapters can be read as a stand-alone body of knowledge (e.g. Chapter 1 and Chapter 10), while others are more connected with other chapters.

Chapter 1 provides a historical perspective on outsourcing and offshoring, the marketplace, and the incentives for firms from around the global to tap into sourcing opportunities. Chapter 2 discusses the various types of IT and business processes that could be sourced globally. It also examines the various sourcing arrangements available according to the nature of work outsourced. Chapter 3 considers the geographical aspect in the sourcing decisions and the factors that both client and supplier companies should consider when deciding on where activity X should be located. Chapter 4 provides an overview of the vendor's landscape, by examining certain vendor characteristics and the desired core capabilities of the vendor. Chapter 5 examines the notions of expertise and knowledge in sourcing relationships from both the vendor and client perspectives, and discusses issues related to the knowledge transfer process. Chapter 6 considers the vendor selection strategy from a client's viewpoint. This includes the evaluation of vendors, the outsourcing arrangements, the retained organization capabilities, and legal issue. Chapter 7 considers the outsourcing lifecycle and its key activities from a client's perspective. It also provides an overview of key transition issues. Chapter 8 addresses the key challenges faced by both client and vendor regarding governance of various outsourcing projects. Chapter 9 focuses on the management of globally distributed teams from a sourcing relationship perspective. Finally, Chapter 10 reviews recent trends and emerging issues in the arena of global sourcing.

CHAPTER 1

Overview of the global sourcing marketplace

Introduction

With the advent of globalization and enhanced levels of competition, many organizations have started to have considerable difficulties in developing and maintaining the range of expertise and skills needed to compete effectively. The emergence of American, European, Japanese, and Third World multinationals has created a new competitive environment, requiring the globalization, or at least semi-globalization of corporate strategy. This need has led many companies to engage with various kinds of sourcing strategies, such as outsourcing, offshoring, offshore outsourcing, nearshoring, and onshoring. Therefore, this chapter will focus on:

- the key terminologies used in the sourcing literature;
- the key drivers of global sourcing;
- the benefits for clients and vendors from engaging in global sourcing;
- present market trends in the global sourcing market;
- future developments of the global sourcing market.

Definitions

Sourcing is the act through which work is contracted or delegated to an external or internal entity that could be physically located anywhere. Sourcing encompasses various in-sourcing (keeping work in-house) and outsourcing arrangements such as offshore outsourcing, captive offshoring, nearshoring and onshoring.

Outsourcing is defined as contracting with a third service provider for the management and completion of a certain amount of work, for a specified length of time, cost, and level of service.

Offshoring refers to the relocation of organizational activities (e.g. IT, finance and accounting, back office, human resources) to a wholly owned

subsidiary or an independent service provider in another country. This definition illuminates the importance of distinguishing whether the offshored work is performed by the same organization or by a third party. In the first case, where the work is offshored to a center that is owned by the organization, we are referring to a *captive* model of service delivery. In the second case, where the work is offshored to an independent third party, we are referring to an *offshore outsourcing* model of service delivery.

In the case where organizational activities are relocated to a neighboring country, we use the term *nearshoring* (e.g. US organizations relocating their work to Canada or Mexico).

Global sourcing background

Offshoring strategies appear to be promising in terms of the reduction of costs, as certain organizational activities would be moved to a subsidiary or an independent service provider in a country with favorable conditions. The US is a major player in the offshoring of IT and business process applications. However, over the past few years offshoring has appeared to be gaining momentum in Europe as well.

Table 1.1, originated by Lewin and Peeters (2006), depicts the results of their survey of 90 companies among 650 US Forbes Global 2000 companies with regard to the major functions offshored at that time. The survey further investigated the offshoring plans of the participant companies in the next 18 to 36 months following the survey. According to these results IT was the most frequently offshored function, with 66% of participants offshoring one or more IT-associated processes. Finance and accounting

Table 1.1 Offshored functions-current landscape and expected evolution

Functions	Companies that offshore the function (in %)	Expected growth rate in #implementations (next 18–36 months)
IT	66	52
Finance/Accounting	60	43
Contact centers	54	48
Engineering services	44	55
Research	32	81
Human resources	24	75
Procurement	24	42
Other	18	N/A

Source: Adapted from Lewin and Peeters, 2006

Table 1.2 Locations of offshoring

Locations	Existing implementations (in %)	New implementations (next 18 to 36 months) (in %)
India	69	66
China	7	7
Other Asia	7	16
Latin America	6	1
Philippines	4	3
Canada/Mexico	4	1
Eastern Europe	3	6

Source: Adapted from Lewin and Peeters, 2006

were the next most common functions to be offshored; contact centers followed with 54%, engineering services with 44%, and research with 32%. With regard to the future plans of the participant companies, major increases were related to the offshoring of research (81% growth rate) and human resources (75%).

According to the same survey, India was by far the most attractive destination for IT and business process applications offshoring. More specifically, 69% of surveyed implementations were located in India, 7% in China, and 7% in other Asian countries. Table 1.2 presents the major destinations of offshoring.

The same survey revealed important findings with regard to the chosen service delivery model of the participant companies (captive versus offshore outsourcing). More specifically, the results showed that 35% of implementations were offshored to captives, while 65% were offshored to a third party. The study also revealed that the choice of service delivery model was highly correlated with the type of function being offshored. On this basis, 89% of IT and 90% of contact centers were offshored to an independent service provider. On the other hand, 69% of finance and accounting implementations were offshored to captives. Figure 1.1 illustrates in detail the results of the survey in relation to the chosen offshoring service delivery model.

Drivers, benefits, and risks of global sourcing

The growth of global sourcing has been attributed to many factors. First, technological advances in the telecommunications industry and the Internet have shrunk space and time and have enabled the coordination

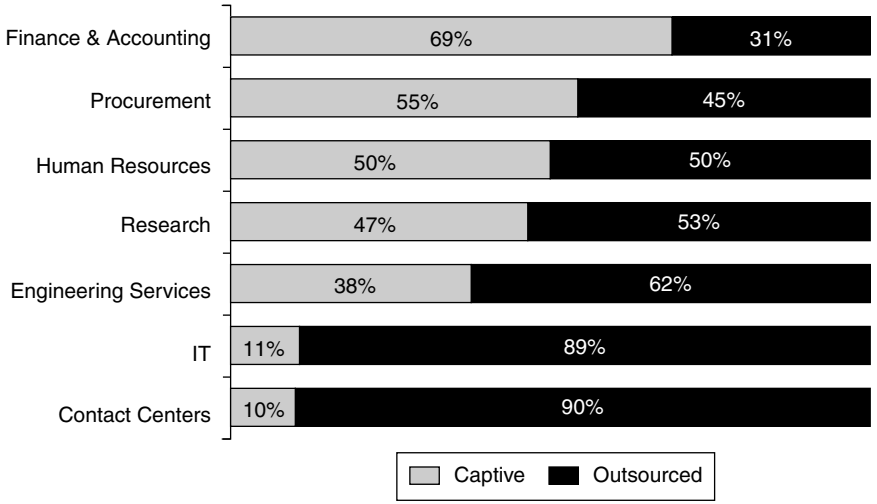


Figure 1.1 Percentage of captive and outsourced implementations per function

Source: Adapted from Lewin and Peeters, 2006

of organizational activities at the global level. Other reasons include the supply of skilled, yet low-cost, labor in countries such as India; the investments in infrastructure; the improved business, economic, and political climate in a number of developing countries; and the standardization of IT processes and communication protocols that contribute to the efficiency of interorganizational activities.

Along these lines, many countries invested heavily in improving their telecommunications infrastructure, which is essential for electronically transmitted services. For example, Barbados has had a fully digitalized communications system with direct international dialing since the beginning of the 1990s. Jamaica constructed its "Digiport," with a 20,000-telephone-line capacity and speeds of 1.5 Mbps. Furthermore, many countries provided specific tax advantages to attract offshoring. For example, the standard tax rate in Ireland is 43%, but BPO firms get a favorable rate of 10% until 2010. Jamaica has a 34% tax rate, but the "Digiport" BPO free trade zones are tax free. The US tax code also favors offshoring over keeping work domestic. US corporations are allowed to defer taxes on offshore units until the money comes back to the USA. Thus, firms are given an interest-free loan on taxes owed if they offshore work.

Global sourcing may offer several benefits which are basically associated with the advantages of outsourcing in general. Along these lines, a company may accomplish significant cost advantages through the creation of economies of scale, access to the unique expertise of a third party, and the reduction or stabilization of overhead costs.

Furthermore, a company may benefit from outsourcing by concentrating on core activities, on organizational specializations, or focusing on achieving key strategic objectives. More specifically, following a "core competency through outsourcing strategy" may enable a company to focus its resources on a relatively few knowledge-based core competencies where it can develop best-in-the-world capabilities (Quinn and Hilmer, 1994). Concentration on a company's core business may allow it to exploit distinctive competencies which will constitute significant competitive tools.

Another major benefit of outsourcing is that it can give the organization access to the service provider's capabilities and innovative abilities, which may be expensive or impossible for the company to develop in-house (Quinn and Hilmer, 1994). Some analysts contend that an important source of user value is the firm's access to economies of scale and the unique expertise that a large provider can deliver. Since providers are typically servicing many clients, they often achieve lower unit costs than any single company can (Alexander and Young, 1996).

Even more, a network of suppliers can provide any organization with the ability to adjust the scale and scope of their production capability upward or downward, at a lower cost, in response to changing demand conditions, and at a rapid rate. As such, outsourcing can provide greater flexibility (McCarthy and Anagnostou, 2003). Furthermore, outsourcing can decrease the product/process design cycle time, if the client uses multiple best-in-class suppliers, who work simultaneously on individual components of the system, as each supplier can contribute greater depth and sophisticated knowledge in specialized areas and thus offer higher quality inputs than any individual supplier or client (Quinn and Hilmer, 1994). On this basis, having several offshore centers can provide around-the-clock workdays. In other words, development and production can take place constantly by exploiting the time difference between different countries.

However, there exist several disadvantages to adopting sourcing strategies. Loss of critical skills or overdependence on an outside organization for carrying out important business functions may evolve into significant threats to a company's well-being. Furthermore, security and confidentiality of data can be a major issue for many companies. Another major issue is losing control over the timing and quality of outputs since these will be undertaken by an outside vendor which may result in a poorer quality of

the final product or service and may generate effects which could be very negative to a company's image.

Even more important is the fact that, unless the buyer's core competency is a true block to entry into the marketplace, some suppliers after building up their expertise with the buyer's support, may attempt to bypass the buyer directly in the marketplace (Quinn and Hilmer, 1994). On these grounds, it is critical that a company manages its sourcing strategy in a way that is not nurturing a future competitor.

With regard to outsourcing arrangements, it is important to note that there are some risks that are specifically linked to these. For example, outsourcing is usually followed by changes in the organizational structure. Redundancies and layoffs are commonplace in outsourcing situations. Research and experience indicate that outsourcing effectively signals to employees their employer's intention to initiate a change that may involve de-skilling and redundancies (Kakabadse and Kakabadse, 2000). Such initiatives generate internal fears and employee resistance.

Moreover, Hendry (1995) highlighted the fact that outsourcing can be associated with problems related to the company's ability to learn, as it can increase the insecurity and decrease the motivation of the workforce, reducing willingness to question and experiment (Hendry, 1995). While interactions among skilled people in different functional activities often develop unexpected new insights or solutions, there is the fear that outsourcing will make such cross-functional synergies of ideas and knowledge less likely (Quinn and Hilmer, 1994).

With regard to offshore outsourcing, Rottman and Lacity (2006) offered a comprehensive list of risks which are specifically associated with such ventures. These include different kinds of business, legal, political, workforce, social, and logistical risk, and these are illustrated in Table 1.3.

With regard to the strategic drivers and risks of offshoring, the results of the study of Lewin and Peeters are particularly revealing. As illustrated in Table 1.4, the major strategic driver for offshoring is the need to cut down costs, cited by 93% of the respondents. Other significant drivers appear to be competitive pressure with 69%, the need for improved service levels with 56%, and the need for accessing qualified personnel with 55%.

Table 1.5 presents the perceived risks of offshoring. Poor service quality was cited by 61% of the respondents as the most important offshoring risk, followed by lack of cultural fit with 54% and loss of control with 51%.

Table 1.3 Offshore outsourcing risks

Risk category	Sample risks
Business	No overall cost savings Poor quality Late deliverables
Legal	Inefficient or ineffective judicial system at offshore locale Intellectual property rights infringement Export restrictions Inflexible labor laws Difficulty obtaining visas Changes in tax laws could significantly erode savings Inflexible contracts\Breach in security or privacy
Political	Backlash from internal IT staff Perceived as unpatriotic Politicians threaten to tax US companies that source offshore Political instability within offshore country Political instability between United States and offshore country
Workforce	Supplier employee turnover Supplier employee burnout Inexperienced supplier employees Poor communication skills of supplier employees
Social	Cultural differences Holiday and religious calendar differences
Logistical	Time zone challenges Managing remote teams Coordinating travel

Source: Adapted from Willcocks and Lacity, 2006

Table 1.4 Strategic drivers of offshoring

Offshoring strategic drivers	Respondents citing driver as important (in %)
Cut down costs	93
Competitive pressure	69
Improving service levels	56
Accessing qualified personnel	55
Changing rules of the game	41
Industry practice	37
Business process redesign	35
Access to new markets	33
Enhancing system redundancy	27

Source: Adapted from Lewin and Peeters, 2006

Table 1.5 Perceived risks of offshoring

Risks perceived	Respondents citing risk as important (in %)
Poor service quality	61
Lack of cultural fit	54
Loss of control	51
Lack of client acceptance	49
Lack of data security	46
Weakening employee morale	45
Employee turnover in offshore service center	44
Operational inefficiency	41
Infrastructure instability in host country	40
Intellectual property loss	39
Political instability in host country	39
Political backlash	35
Disaster recovery	26

Source: Adapted from Lewin and Peeters, 2006

The future of outsourcing and offshoring

By the end of 2009, ITO revenues exceeded US$ 250 billion while those for BPO were more than US$ 140 billion. The revenues from offshore outsourcing of business and IT services exceeded US$ 60 billion, and over the next five years the compound annual growth rate for offshore outsourcing is expected to be about 20%. Willcocks and Lacity (2006) identify the following 11 trends for the future of global sourcing markets:

1. *Spending will continue to rise in all global sourcing markets despite 2004–2005 media attention on backsourcing:* Irrespective of some major backsourcing ventures (such as JP Morgan in 2004 and Sainsbury in 2005), Willcocks and Lacity maintain that these do not represent a major trend towards backsourcing, and they specifically emphasize that on their figures "the most popular course of action at the end of a contract will continue to be contract renewal with the incumbent supplier." The authors also estimate that a quarter of contracts will be re-tendered and awarded to new suppliers and only a tenth will be backsourced.
2. *Developing countries beyond India will become important players in the global business and IT services market:* Countries that appear to have the potential to follow India as attractive destinations for global sourcing include the Philippines and China. On the other hand, large

Indian suppliers have gained much expertise and experience in dealing with and building relationships with US customers, which will enable them to demand higher prices. In the US, the recent Central American Free Trade Agreement (CAFTA) is expected to further open up IT and Business Process outsourcing in Cost Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic. In Western Europe, companies are expected to increasingly source IT and business providers to Eastern Europe and North Africa.

3. *Large companies will give application service provision (ASP) a second look:* Large organizations will reconsider ASP for several reasons. First, large companies will want net-native applications that can be delivered only through ASP. Second, large companies appear more willing to give up on their expensive proprietary suites for more cost-efficient ASP alternatives.

4. *Business process outsourcing will overshadow IT outsourcing:* According to Willcocks and Lacity, the market for mainstream BPO expenditure is likely to grow worldwide by 10% a year from US$ 140 billion in 2005 to over US$ 220 billion by 2010. The major business functions to be outsourced include human resources, procurement, back office administration, call centers, legal, finance and accounting, customer-facing operations, and asset management. The business logic that is expected to drive BPO is that organizations recognize back office administration as a secondary activity and do not wish to invest in back office innovations. Suppliers, on the other hand, are rapidly trying to build capabilities that will enable them to offer beneficial alternatives to inefficient processes and functions. Along these lines, many BPO deals are expected to dominate much of the back-offices IT systems.

5. *IT outsourcing will continue to grow but with new value propositions from the market:* One example of new, innovative value propositions may be the consolidation of networks in the same way suppliers consolidated data centers during the 1990s. The reason for this is that it is becoming increasingly expensive for companies to manage private networks while there are a lot of opportunities to consolidate private networks among a few large suppliers.

6. *Selective sourcing with multiple suppliers will remain the dominant trend:* According to Willcocks and Lacity, over 75% of organizations in the developed economies outsource 15%–50% of their IT budgets, typically with multiple suppliers. They also predict that the average

percentage of corporate IT budgets is set to rise, with IT outsourcing reaching 34%, IT-intensive BPO 15%, and offshoring 9% of the IT budget.

7. *Clients will control in driving and designing deals:* Contrary to the 1990s, when most deals were designed by suppliers, clients are recognizing the need to understand and control the conditions under which the outsourcing venture is executed. Over 80% of contracts are now being drafted by the client, or based on appropriate templates, a change that represents a significant power shift towards clients. On this issue one supplier recently noted "we own 80% of market here, yet clients are now dictating to us, if we want to stay in business, we have to do it on their terms." However, client control can have reverse effects if it results in the suppliers winning a "cursed" deal.

8. *Clients will invest much more in contract management:* According to Willcocks and Lacity, the cost of getting to contract is between 0.4% and 2.5% of the contract value. Ongoing management costs are between 3% and 8% of contract value. These costs are expected to increase. This is primarily because of three reasons. The first is related to the rise of offshoring, where management costs typically fall between 12% and 15% of contract value. Second, clients will try to build their internal core capability to levels that give better payoffs from outsourcing. Third, contract management is a major determinant of outsourcing success.

9. *Outsourcing will help in-sourcing:* In-house operations are increasingly adopting the techniques of the market. One such example is the use of Service Level Agreements (SLAs). SLAs define the services provided, the metrics used to evaluate services, as well as the reporting and governance put in place. While prior to outsourcing only a few organizations employed the SLA technique internally, after outsourcing nearly 60% have some form of internal SLA.

10. *Outsourcing failures and disappointments will continue:* Outsourcing will continue to be a venture which is very promising in terms of rewards, but which also carries high amounts of risk. Extrapolating past evidence into 2006–2011, Willcocks and Lacity estimate that 70% of selective sourcing deals will be considered relatively successful. In contrast, they estimate that only 50% of large-scale deals involving complex processes that represent more than 80% of the relevant budgets will be successful.

11. *Clients will move en masse from "hype and fear" into maturity:* According to Willcocks and Lacity, the typical learning curve for outsourcing includes four stages. In the first stage senior executives become aware of an outsourcing market through marketing "hype" or irrational propaganda. In the second stage most senior executives initially engage in outsourcing to seek lower costs. In the third stage senior executives recognize outsourcing as a strategy aiming at quality of operations as well as the reduction of costs. In the fourth stage, more mature adopters use outsourcing to strategically enable corporate strategies, such as increasing business agility, accessing new markets, creating new markets, and so forth. On this basis, the authors suggest that IT outsourcing organizations are at different points in this model, but the mass are in phases 3 and 4. In fact, with offshore and business process outsourcing, the bulk of organizations are much lower down this learning curve. However, as outsourcing moves in 2006–2011 to become a core part of budgets and organizational management, learning and cross-learning in all three areas (IT, business process, and offshore outsourcing) will increase and organizations will become more mature in managing their outsourcing ventures.

Summary

In this chapter we explained the key terminology relating to global sourcing. This chapter also provides an extensive review of past, present, and future trends in the area of global sourcing. It is clear that more and more firms have introduced business solutions relating to global sourcing to reduce costs or to access scarce skills. Furthermore, there is a growing interest in outsourcing business processes that makes the sourcing phenomenon a challenge of any manager within the firm.

CHAPTER 2

Sourcing models: What and when to outsource/offshore

Introduction

While global sourcing has been gaining wider recognition as a significant approach to boost the efficiency and competitiveness of the firm, various types of global sourcing models have begun to emerge. These include domestic outsourcing, offshore outsourcing, domestic insourcing, and captive models. The major distinction between these models lies in whether the function is performed by a subsidiary business unit of the firm or by an external vendor, and also whether the function is performed in the country where the organization is located or in an offshore location. More specifically:

- *Domestic outsourcing* refers to contracting with a third party who is situated in the same country as the client organization for the completion of a certain amount of work, for a specified length of time, and at a certain cost and level of service.
- *Offshore outsourcing*, on the other hand, refers to outsourcing arrangements with vendors who are situated in a different country from the client organization.
- *Domestic insourcing* refers to managing the provision of services internally, within a business unit that is located in the same country as the organization.
- *Captive models* refer to the strategic choice to locate organizational activities within a wholly owned subsidiary in another country.

The focus of this chapter will be on the:

- various sourcing models available for clients and vendors;
- IT and IT-enabled services and processes that can be outsourced;
- factors that should be considered when making a decision about outsourcing and offshoring;
- processes which are most suitable for offshoring.

Considerations for outsourcing and offshoring

An activity can be sourced as an overall set of processes or as smaller parts of it. Using the scope of outsourcing as a criterion (i.e. the degree to which a process is managed internally or by a third party), we distinguish between models of total outsourcing, total in-house sourcing, and selective outsourcing.

- *Total outsourcing* refers to transferring of more than 80% of a function's operating budget to external providers.
- *Total in-house sourcing* refers to retaining the management and provision of more than 80% of the function's operating budget within the organization.
- *Selective outsourcing* refers to sourcing selected functions to external parties, while managing 20%–80% of the function's operating budget internally.

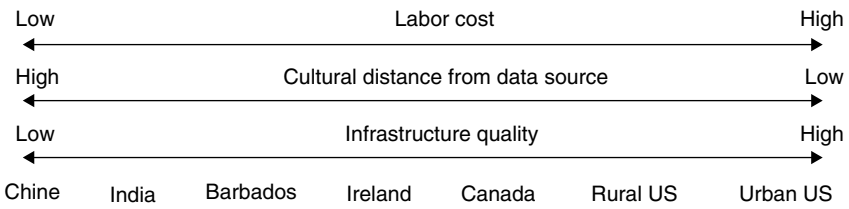
Along these lines, Metters (2008) has suggested that offshoring and outsourcing decisions should be seen as a spectrum, rather than as distinct categories. With regard to the offshoring decision, Metters explains that initially it may appear categorical (i.e. a process either performed in the home country or offshore). However, Metters also emphasizes that there are degrees to the level of offshoring which are related to the amount of risk a firm undertakes.

For example, we could consider a US firm that would like to lower the costs of a back-office process related to keying in handwritten English text to a computer system. Modern information and communication technologies enable the performance of this process from various remote locations in a more cost-effective way.

In the decision relating to where to offshore, a number of factors may play a very significant role, depending on the company's business model. Metters (2008) focuses on the case of electronically transferrable services and identifies labor costs, cultural distance from data source, and quality of infrastructure as some of the most important factors that need to be considered when making offshoring decisions.

Continuing with our example, if we take into account the labor costs of clerical workers, the most favorable cost alternative would be offshoring the process of keying handwritten English text to a computer system to China. As illustrated in Table 2.1, China is the most attractive destination for a US customer in terms of the labor costs. However, non-English speaking Chinese workers use character recognition, rather than understanding

Table 2.1 Spectrum of single facility offshoring choices for a US customer



Source: Metters, 2008

English as a language. For this reason, undertaking this process would require two or even more employees to independently key characters and ensure that the process is performed correctly. Another choice might be India, where English-speaking Indians would perform the keying. This choice would entail higher wages than in China, but only one-fifth the level of US wages. Furthermore, this choice would entail a relatively lower level of language and cultural barriers between the client and the supplier organization. An even more expensive option might be to offshore the process to Barbados, where English is the prevalent spoken language and salaries are 20%–50% of the US levels. Another option might be to offshore (more precisely to nearshore) the work to Canada, where wages are lower relative to the US, yet greater than the other destinations mentioned. A further option might be what is termed "homeshoring" or "rural outsourcing," which involves sending the work to lower-wage, usually rural, regions within the US. Finally, the firm can engage in offshoring to multiple destinations and perform the same process within different facilities around the world. On this basis, the cost of labor, the cultural distance, and the quality of infrastructure are the most relevant factors in the choice of an offshoring option.

In contrast to electronically transmitted services, viewing offshoring options as a spectrum is more complex if we consider non-electronically transmitted services (e.g. manufacturing). For such processes there are different factors, such as tax regimes, tariffs, and government regulations, which make costs highly specific, rather than general.

Outsourcing can also be seen as a spectrum of choices. Willcocks et al. (2006) use the criteria of resource ownership (i.e. who owns the resources and infrastructure), resource management (i.e. who manages the resources), customer/supplier relationship (i.e. single-sourcing, or sourcing to multiple suppliers), typical location of supplier staff (i.e. on customer site, on supplier site, or a combination of both), and type of contract, and

make a distinction among five types of outsourcing models. As illustrated in Table 2.2, for each of these models they identify the type of activities that it would be most suitable for.

In the *time and materials model*, the supplier provides services that complement the customer's capabilities and are managed in-house. This is the most common sourcing model and poses the least risk to the customer. An example might be to hire consultants to help in-house teams with the implementation of a Customer Relationship Management (CRM) system. In the *exchange-based model*, the supplier undertakes a customized product or service. In this model, the customer typically transfers its IT assets to the supplier's site. In the *netsourcing model*, a standard product or service is delivered over the Internet or other network. Customers can rent almost all popular independent software vendor products from netsourcing providers, including CRM, ERP, and so forth. In the *joint venture model*, a new company is created by the client and the supplier. The customer typically provides personnel, becomes the new company's first major customer, and shares future profits if the venture expands its business. In the *enterprise-partnerships model*, the goal is to transform the back offices of large organizations that have grown through mergers and acquisitions.

As has already been illustrated in Chapter 1, information technology is a major subject of sourcing and has created an entire industry around it. The more a firm is operationally dependent on reliable and real-time IT functions, the more attractive outsourcing becomes as an option. However, careful analysis must be made in the selection of an appropriate and reliable vendor who will provide consistent and trustworthy service delivery. (Different types of vendors and vendor selection criteria will be discussed in detail in Chapters 4 and 6 respectively).

Outsourcing constitutes a venture with fewer risks when IT-related operations include mainly maintenance work or projects which are valuable but not vitally significant to the firm. However, as new systems become increasingly important in delivering distinctive competencies to the company's business model, the outsourcing decision comes under more and more scrutiny. In such cases, the potential loss of control and flexibility can have detrimental effects and thus become cause for greater concern.

McFarlan and Nolan (1995) developed the strategic grid framework that provided major insights to firms considering the outsourcing of IT. The framework assesses two dimensions of IT activities: current dependence on information (also referred to as the impact of IT on core operations), and importance of sustained, innovating information resource development (also referred to as the impact of IT on core strategy).

Table 2.2 Suitability of various outsourcing models

Model	Resource ownership (Infrastructure and people)	Resource management	Customer/ supplier relationship	Typical location of supplier staff	Typical customer/ supplier contract	Activities most suited for this model
Fee for service outsourcing: time & materials	Supplier	Customer	One-to-one	Supplier staff on customer site	Time & materials	Core or non-core capabilities; Customized products & Services; Uncertain business or technical requirements
Fee for service outsourcing: Exchange-based	Supplier	Supplier	One-to-one or One-to-many	Mixed (some supplier staff on customer site, some staff centralized at supplier site)	Highly customized contract defining costs and service levels for that particular customer	Non-core capabilities; Customized products or services; Stable business and technical requirements
Netsourcing	Supplier	Varies	One-to-many	Supplier staff not on customer site	Generic contract specifying rental costs and very minimal service guarantees	Non-core capabilities; Standard products or services; Stable business and technical requirements
Joint ventures	Venture	Supplier investor	One-to-one: Customer is both investor and first major customer	Mixed (some supplier staff on customer site, some staff centralized at venture)	Highly customized for operations delivery; broadly defined for revenue sharing	Customer non-core, supplier core-capabilities; Significant market for venture's product & services. Frequently used to access offshore resources
Enterprise partnerships	Partnership	Customer and supplier	One-to-one	Mixed (some supplier staff on customer site, some staff centralized venture)	Broadly defined for revenue sharing, customized after partnership is formed	Customer non-core, supplier core capabilities; Significant market for venture's product and services; Used for large scale transform of large back offices

Source: Willcocks et al., 2006

For IT services that have high impact on operations but have relatively low impact on strategy (e.g. maintenance of customer-facing applications), the outsourcing assumption is "Yes," unless the company is large in scale and exceptionally well-managed. Through economies of scale vendors should provide significant cost savings to client firms if risks of operational failure are mitigated.

For IT activities that have low impact on both core operation and strategy McFarlan and Nolan also recommend to pursue outsourcing. Outsourcing of such activities pose low risk of loosing control and offer significant savings, in particular to large firms.

For IT activities that have low impact on core operations but highly dependent on up-to-date and innovative IT functions, the outsourcing assumption is "No" because of risks associated with high strategic risks.

Finally, for IT activities that are of high significance for operations and additionally are dependent on a highly innovative IT infrastructure, the outsourcing assumption is again "No," as it would represent handing out processes that are key to the sustainability of competitiveness.

Although the suggestions by McFarlan and Nolan (1995) have dominated outsourcing decision making, they have received more recent criticism from Levina (2006). Levina has suggested that this framework provides little guidance in the case of offshoring. For example, Levina highlighted the fact that in the offshore context, if an IT activity has a high impact on operations, then at least part of this activity has to be kept onshore (e.g. first level support to customer-facing applications). In cases where IT has low impact on both core operations and strategy (e.g. migration of legacy applications that are heavily linked with other applications), the decision to outsource is again problematic, because some activities of this type may require deep domain knowledge, which offshore providers may not possess and which might be difficult to acquire. While IT activities such as Intellectual Property (IP) and data security sensitive applications should be kept in-house according to McFarlan and Nolan (as they have low impact on core operations and high impact on core strategy), Levina has suggested that such activities could be considered for outsourcing under careful management. She explains that there are large vendors in countries such as India who are particularly specialized in IP and data security systems and who would have a strong motive to perform well as their reputation would be at stake. Finally, Levina suggests that a company may decide to invest in a captive unit if a particular IT capability is poorly served in the offshore market and the company has the knowledge and resources to deliver it.

Identifying the right processes for outsourcing and offshoring

Factors that influence suitability of processes for outsourcing and offshoring

Understanding the core of each sourcing model and what it has to offer is of vital significance for engaging in effective sourcing strategies. However, in the case of outsourcing and offshoring (including offshore outsourcing and captive models) it is of equal importance to identify which processes should be transferred to another provider (whether domestic or offshore) or another country, as part of the business of a captive center.

According to Metters (2008), firms typically consider activities that are not critical for the company's operations or for the sustenance of competitive advantage. The reason is that when a task is being outsourced, the institutional knowledge concerning the task is also leaving.

The scale of the process is also important in deciding if outsourcing is an appropriate solution. The costs associated with searching and selecting an appropriate vendor, establishing service level metrics, creating and managing the contract, monitoring the ongoing outsourcing relationship, and enforcing the contract may be very significant. In the case of offshoring, these costs are even more significant due to the endemic complexity of these ventures. However, a process can also be too large for outsourcing to be effective. In other words, when a process is too large, outsourcing may only represent an additional layer of management, thus complicating operations and adding costs.

Processes that are being influenced by rapidly changing technologies constitute good candidates for outsourcing, unless of course they are critical to the company's business model and operations. The reason is that small in-house units have a relatively limited capability to keep up with the rapidly changing technological environment. On the other hand, firms that dedicate themselves to these activities (such as IBM, Accenture, Computer Sciences Corporation, Infosys and Tata Consultancy Services) can be more innovative because they are specialized in this business.

Furthermore, outsourcing (or insourcing) is appropriate for activities that have a high degree of variance. Such activities are those that require, for example, 50 people one day and only 10 people the next day. Hiring 50 people for this activity, when in essence they are only occasionally needed, constitutes a significant added cost for the firm. However, an outsourcer can mitigate this variance by serving several counter-cyclical clients.

With regard to offshoring, according to Aron and Singh (2005), most companies do not make decisions systematically and rigorously enough. The result is that they repeatedly make at least one of three fundamental mistakes. First, while many companies spend time choosing countries, cities, and suppliers and put a significant effort into negotiations, they do not spend time on the evaluation of which processes should go offshore and which should not. It appears that most companies have a difficulty in distinguishing between "core" processes that they must control, "critical" processes that they must buy from expert vendors, and "commodity" processes that they can outsource.

Second, most organizations do not fully consider the risks associated with offshoring. Financial managers and senior executives make calculations in relation to the costs and benefits of offshoring without taking into account that after signing the deal the supplier might gain an upper hand. Most customers of outsourcing appear to disregard any risks related to the power relation between the two partners and make choices that eliminate the savings from outsourcing.

Third, a number of companies do not understand that outsourcing is not an all-or-nothing choice, but that there is a range of sourcing models that they can follow.

Metters (2008) suggested that processes that require substantial levels of communication between the client and the supplier do not constitute good candidates for offshoring. Time-zone differences, language, and other sorts of communications barriers can shrink the benefits of offshoring. However, Aron and Singh (2005) appear to be more concerned with how processes are ranked in terms of their value to the organization. The authors suggest that there must be a careful consideration between business processes that constitute good candidates for offshoring and those that do not. Processes that are important for the creation of value should not be offshored.

Along these lines, Aron and Singh (2005) suggest that executives should rank organizational processes along two dimensions: (i) their potential of value-creation and (ii) their potential of value-capture. More specifically, executives should consider how crucial a process is in the creation of customer value compared to other processes. Furthermore, they should consider the extent to which each process enables the organization to capture some of the value that is created for customers. For the processes that are ranked high (e.g. working capital management and cash-flow forecasting) offshoring is not suggested. Processes that are ranked lower (e.g. payment authorization and invoice verification) appear better candidates for offshoring.

It is important to note that one of the two dimensions can be more important for certain industries or specific companies. In this case, rankings must be calculated taking into account the relative weight of each of these dimensions.

By ranking all the company's processes, a value hierarchy is created that reflects which processes should go offshore and which should not. The higher the rank of a process the more crucial its role is to the company's strategy, and thus the less it should be considered for offshoring or outsourcing.

A similar approach has been suggested by Willcocks et al. (2002) to evaluate which processes constitute good candidates for outsourcing and which do not. The authors suggest that business activities should be assessed in terms of their contribution to business operations which can be compared with the concept of value-creation by Aron and Singh (2005), as well as in terms of their contribution to competitive positioning (which matches the concept of value-capture of Aron and Singh).

As is illustrated in Table 2.3, "Order winners" are those activities that contribute greatly to the company's business operations as well as to its competitive positioning. These activities in essence constitute the basis of the firm's differentiation relative to its competitors and should be kept in-house. For example, such activities for Dell include those that maintain and enhance the speed of operations and its focus on core business. "Qualifiers" are those activities that are critical for business operations; yet do not contribute to the company's competitive positioning in a major way. These activities should best be sourced, which could include the involvement of a third party if it meets the right cost and quality criteria. For example, aircraft maintenance systems are a minimum requirement for airlines to compete in the

Table 2.3 Decision-making matrix on outsourcing

Contribution to business operations	Commodity	Differentiator
Critical	"Qualifiers" best source	"Order winners" in-house/buy-in
Useful	"Necessary evils" outsource	"Distractions" migrate or eliminate

Contribution to competitive positioning

Source: Willcocks et al., (2002)

industry, but do not constitute an important differentiator between airlines. "Necessary Evils" are those activities that do not contribute significantly to the company's business or to its competitive positioning. These activities constitute good candidates for outsourcing. For example, in the case of Dell such activities include administration, inventory, and payroll tasks. "Distractions" are failing attempts to differentiate a company from its competitors. These activities should be eliminated or migrated to another quadrant. For example, Dell in 1989 opened retail outlets, but soon it discovered that its major distinctive competence was the direct model of selling.

The impact of operational and structural risks on outsourcing and offshoring decisions

Another aspect to consider while deciding which processes can be offshored or outsourced is related to two major types of risk that companies face: *operational risk* and *structural risk*. Operational risk refers to the danger that processes will not function properly and will not operate smoothly after offshoring. Structural risk refers to the danger that the relationship between clients and suppliers may not work as expected.

With regard to operational risk, it is of great significance to evaluate the extent to which processes can be codified and measured. Aron and Singh (2005) make the distinction between transparent, codifiable, opaque, and non-codifiable processes. More specifically

Transparent processes (e.g. transaction processing, telecollection and technical support) can be clearly measured in terms of quality and are the tasks which can be fully codified. Consequently, the operational risk of offshoring and outsourcing in this case is very low.

*Codifiable processe*s can be measured to some extent in terms of the quality of their execution and most of the work can be codified. If firms can measure the quality of the final outcome to a satisfactory extent (as for example for customer service and account management), then the operational risk of offshoring and outsourcing becomes more manageable. However, if measuring the final outcome is not possible (as for example for processes such as equity research, yield analysis and litigation support), then the operational risk becomes very high.

Opaque processes can be codified in terms of the work being done, but the quality of the process outputs is difficult to measure (e.g. for processes such as insurance underwriting, invoice management and cash-flow forecasting). Although the risks of offshoring these processes are moderate,

companies can monitor the work being done and inspect samples to ensure that the outcome meets their expectations. This, however, could be rather troublesome and expensive. If a company can specify how the supplier should do the work, they can lower the risk of offshoring by establishing a performance-based reward system and penalties.

Non-codifiable processes, as the term implies, cannot be codified (e.g. supply chain coordination and customer data analysis). In addition, very often they cannot be measured in terms of the quality being achieved (such as pricing and working capital management). For this reason such processes usually carry a high amount of operational risk. In the case that an organization chooses to outsource such processes, they should closely supervise the vendor's work.

The ability to monitor work and the precision of metrics used to measure process quality define the degree of structural risk that outsourcing presents to a client firm (Aron and Singh, 2005). For example, transaction processing and insurance claims processing are typically easy to monitor using precise metrics to measure their quality. Therefore these activities present low structural risk. On the other hand, high risk activities are processes such as product design and Research and Development (R&D) simply because it is difficult to monitor outcomes and challenging to define a precise quality metric.

While engaging in an outsourcing relationship most companies assume that their supplier will behave in a collaborative way. This is not necessarily true, even in the case of companies that are buying services from captive centers that they own. For example, structural risk may arise because a vendor does not update the processes of performing certain tasks, does not invest in employee training, and does not hire the most qualified people. Another problem is that, very often, service providers exert much less effort in getting the work done than they originally agreed to. Structural risk also arises when contractual terms are altered some time after clients have handed over processes to providers. Once a company has handed to a supplier a set of processes it is not easy to take it back in-house at short notice. Providers are aware of this and thus may use their power position to demand higher prices.

It is also important to consider that, when firms source processes that require the transfer of a large amount of knowledge, they have to invest time and effort to pass this knowledge on to the supplier's employees. Furthermore, some processes take a long time to stabilize when they are offshored. In both cases the cost of switching providers is very high.

Nonetheless, structural risk can be mitigated in a number of ways. First of all, firms must establish contractual clauses that will impose on the

Table 2.4 Choosing location and organization form

Operational risk	Low	Moderate	High
High	Outsource to service provider located nearby (nearshore) *Litigation support*	Set up captive center nearby or onshore *R&D design*	Execute process in house and onshore *Pricing, corporate planning*
Moderate	Outsource to offshore service provider over time *Insurance claims processing, customer support*	Outsource carefully, using 'extended organization' offshore, and monitor closely in real time *Supply chain coordination*	Set up captive center offshore *Equity research*
Low	Outsource to offshore service provider *Data entry, Transaction processing*	Outsource carefully, using 'extended organization' offshore *Telecollection, technical support*	Outsource carefully, using 'extended organization' offshore, and conduct frequent process audits *Customer data analysis, market research analysis*

Structural risk

Source: Aron & Singh, 2005

provider the obligation to continue to deliver the service at a certain price after the contract's expiry date. Usually this period is 150% of the time that it would take for the provider to deliver output that matches the organization's requirements and quality standards. Furthermore, companies should try to split business between two or more providers. Working with multiple suppliers provides a strong element of power for a company for at least two reasons. First, if a supplier underperforms, it becomes easier to transfer the work to a supplier that is already executing the same processes. Second, working with multiple providers will generate a competitive climate among them that, if managed carefully, can become very beneficial for the customer, both in terms of the quality of service delivered and in terms of price.

Aron and Singh (2005) suggest that firms should base their outsourcing and offshoring decisions on the assessment of operational and structural risks. For activities that present high operational and structural risks (e.g. corporate planning), they recommend to execute in house and onshore. Activities that present moderate operational and structural risks (e.g. supply chain coordination) they suggest to outsource carefully, using "extended

organization"[1] offshore, and monitor closely in real time. Activities with low operational and structural risks (e.g. transaction processing) are suitable for outsourcing to offshore service providers. Table 2.4 provides a full spectrum of organizational forms and locations and several example activities suitable for each combination of operational and structural risks (each being low, moderate and high).

Complex and "problematic" business processes

In addition to the value-creation and value-capture criteria that certain processes present, as well as the relative operational and structural risks in outsourcing, Aron and Clemons (2004) also suggest that the complexity of processes plays a very significant role in offshoring decisions. The authors provide a very useful set of criteria for the evaluation of the complexity of processes that can help executives to make appropriate sourcing decisions. These include:

1. The codifiability of the data that must be transferred so that the process can be performed by the external party in a reliable way and with adherence to the required quality standards.
2. The amount of training that must be provided to the employees of the supplier so that they become competent in performing the work in a desirable way.
3. The cost of monitoring performance levels.
4. The difficulty in assessing the managers' level of confidence that their quality assessments will be accurate and reliable.
5. The desired educational level for the employees of the supplier.
6. Revenue per vendor working on the assigned task.
7. Number of sub-tasks associated with the task.
8. A single overall measure of task complexity used to assess the accuracy of ratings and the weight associated with different factors.

Taking a different perspective, Puryear and Detrick (2006) suggest that the main problem with offshoring is that many managers regard it as a panacea for the "problematic" operational processes. Instead of diagnosing

[1] *Extended organization* is a hybrid organizational form where client company specifies the quality of services it wants and work closely alongside provider(s) to get that quality by managing the provider(s) carefully and monitoring the agents' work to ensure that things are done properly (Aron and Singh, 2005).

and correcting deficiencies, many managers seek to transplant the problems somewhere else. In most cases however, this tactic has been shown to be counterproductive. For this reason, the authors suggest that before considering offshoring, firms should examine what are these factors that inhibit performance. On this basis, they suggest three steps:

1. **Revamp business processes:** Increased complexity is a fundamental factor causing organizational deficiencies and poor performance. Offshoring is not always an answer to the problem. Managing complexity and eliminating unnecessary complications can bring significant cost reductions, without engaging in the risks of offshoring.

   This is what Brother International Corporation did when dealing with its problematic frontline call-center operations. The company received approximately 1.8 million calls on an annual basis, which took too long to process. To make matters worse, customer profiles were lost in online databases, and representatives were able to resolve fewer than half of the queries from new customers. However, instead of misdiagnosing the problem as a simple customer service problem that could be solved by offshoring it to an external cost-efficient party, executives tried to dig deeper. They discovered that solving the issue of managing customer complaints could actually benefit the organization if the insights gained with regard to their customers' profiles and tastes could be shared and used to improve marketing and product design. For this reason they did not consider offshoring call-center operations, but instead decided to enhance them. The division consolidated paper manuals into an online directory and integrated its records into a CRM database. Within a year, they had product returns falling by one-third and the time needed to resolve customer problems dropped by 43 seconds on average. The new CRM enabled the company to capture insights with regard to its customers that it used in the development of its new products and marketing strategies.
2. **Reinforce credibility and trust:** Sourcing strategies very often mask dysfunctional relationships between departments and business units. For this reason it is important to make sure that different divisions and units within an organization are collaborating effectively and that their goals are aligned.

   For example, at the brokerage firm Charles Schwab, IT had long been viewed as a source of competitive advantage. But while the IT budget remained strong, pressure to deliver new applications meant less spending to update infrastructure and reduce complexity. Within

time, the firm's IT efforts had drifted. When a major two-year initiative to develop a new portfolio management system failed, trust in IT was eliminated. The company launched a business-led IT project in 2004 which was geared to the restructuring of the IT infrastructure. The alliance and collaboration between the business and the IT department was fundamental for the effective execution of the project.

3. **Find the scale-economy sweet spot:** Contemporary organizations can benefit significantly from the consolidation of activities to the regional or global level.

   For example, one global financial services company reduced its cost structure significantly by consolidating their scattered customer service centers. The company had to deal with a host of inconsistent procedures across its centers. However, the standardization of the technology and the connection between the locations by a routing software boosted both efficiency and customer satisfaction. The overall savings of the company reached the level of US$ 200 million.

Summary

In Chapter 2, we reviewed the key models for making decisions regarding outsourcing and offshoring. While the dimensions involved are many, firms mainly concern with the following questions: which parts of the business to outsource (the 'what' question) and where to (the 'where' question). This chapter brings together the various considerations regarding these two aspects to offer a comprehensive analysis of the various options available for the firm.

Relevant teaching cases

Applegate L.M. (2002), *"Xerox: Outsourcing global information technology resources,"* Harvard Business Online, reference number: 9–195-158.

Carmel E. (2003), *"The Giant Awakens: Sheen Software Systems Considers China for Offshore IT Outsourcing"*, available in this book.

Lacity M., Willcocks L.P., and Feeny D. (2008), *"Transforming a Human Resource Function through Outsourcing: The BAE Systems – Xchanging Enterprise Partnership"*, available in this book.

CHAPTER 3

Country attractiveness for sourcing

Introduction

This chapter discusses the maturity of various geographical locations worldwide and the factors that clients and suppliers take into account when deciding on their offshoring and offshore outsourcing strategies. We focus on the following aspects:

- the comparative advantages of different countries;
- why certain countries dominate certain areas of services;
- the advantages of nearshoring as a sourcing option;
- which countries emerge as the most attractive destinations for offshore-outsourcing and offshoring (beyond Brazil, Russia, India, and China).

BRIC and beyond: An overview of sourcing destinations

Both clients and vendors consider various sourcing destinations, but with different goals in mind. Vendors are interested in locations where they can set up global delivery centers. Client companies are interested in outsourcing or in setting up captive facilities abroad for R&D, or customer support to service their own organization or their customers.

Together with India, which in 2008 attracted some 65% of the ITO and 43% of the BPO market (Willcocks and Lacity 2009), Brazil, Russia, and China are considered the most attractive (Tier 1) sourcing destinations for ITO and BPO. This is mainly because of the scale of services, available skills, and the maturity achieved with regard to sourcing activities. Vendors as well as captive centers based in these countries, in particular in India, tend to move up the value chain, departing from specific and repetitive tasks which are usually captured by new entrants, so-called Tier 2 and Tier 3 countries. By 2009, there were over 120 offshore locations involved in providing ITO and BPO services.

The relative attractiveness of Brazil, Russia, India, and China (BRIC) and non-BRIC countries as sourcing destinations is dynamic. Their

attractiveness needs to be understood in the context of long-term global sourcing trends and the current global economic climate. In this regard, Willcocks and Lacity (2009) argue that spending will continue to rise in all global sourcing markets through recessionary as well as growth periods, but spending on BPO will overtake the spending on ITO within the next five years. BPO expenditure will be in areas such as the human resource function, procurement, back office administration, call centers, legal, finance and accounting, customer facing operations, and asset management. In line with this trend, a highly competitive global services market presents opportunities for countries able to offer the right mix of costs, skills, and reliable service.

Emerging sourcing destinations are trying to differentiate their offerings from BRIC countries and from Tier 2 and Tier 3 rivals when competing for a contract. For example, Egypt is promoting itself as a low-cost destination for call centers that specialize in European languages. Dubai and Singapore present their IT security systems and legal systems as an advantage, in particular, with regard to the outsourcing of high-security and business-continuity services. The Philippines, being a former US colony, stresses its long, cultural ties with the US and the excellent English skills of its population to attract English-speaking call centers. Morocco is trying to attract French-speaking European clients to set up call centers, while Central and South American Spanish-speaking countries are hoping to establish call centers that can provide services to the Hispanic market in the US (Reinhardt et al. 2006). In fact, recent studies have shown that some non-BRIC destinations have been successful in competing with BRIC by positioning their specialized skill-sets in particular areas, and often by offering lower costs than other potential destinations (Kotlarsky and Oshri 2008).

While second and third Tier outsourcing destinations are improving their position, recent years have witnessed the leadership that India has gained in the area of ITO and BPO services. Nowadays, many of the global clients (large MNCs) view India as a center of excellence for ITO and BPO, and not merely as a low-cost destination. Many US and European clients initially engaged Indian suppliers to provide technical services such as programing and platform upgrades (e.g. to help with Y2K compliance). However as these relationships matured, Western clients assigned more challenging work to Indian suppliers (e.g. development and support tasks for critical business applications). From our research we learned that Indian suppliers now wish to assume higher-value activities including R&D and Knowledge Process Outsourcing (KPO).

However, India and to a lesser extent China, Brazil, and Russia are already experiencing upward pressure on wages, combined with rising,

sometimes high attrition. One can say that there is a war for talent within each of the BRIC countries, which suppresses the key factors which made these countries attractive destinations for outsourcing in the first place. For example, many firms from India and China have re-located offshore activities from these countries to more attractive locations. In fact, major Indian suppliers (e.g. TCS) are setting up global delivery centers in China mainly because the supply of engineering skills and the proficiency in English has significantly improved in recent years in China.

To put these views into context, China invested US$ 142.3 billion in 2006 in Information and Communication Technologies (ICT). This huge investment in ICT should improve China's competitive position in the offshoring service market. Willcocks and Lacity (2009) predict that China's ITO and BPO service capabilities are expected to be strong. However, we should indicate that so far, the main ITO and BPO suppliers in China are either large US-based suppliers like Accenture, Cap Gemini, Dell, EDS, HP, and IBM, or large Indian-based suppliers like Genpact, Infosys and TCS. Still, similar to the development of the Indian services supply base, many Chinese suppliers do not want to compete solely in terms of low-level technical skills, but rather are now trying to address the full range of the service value chain.

However despite the optimism of the Chinese, according to Willcocks and Lacity (2009), many client organizations are cautious of China's ITO and BPO services because of language and cultural barriers and fears over losing intellectual property. The Chinese government and business sectors are well aware of these barriers and are actively seeking ways to address them. For example, the Chinese government is investing US$ 5 billion in English language training to improve the marketability of the ITO and BPO services from China.

Developing countries other than India and China are becoming players in the IT services market. Many US clients already use Central American suppliers for Spanish-speaking business processes such as help-desks, patient scheduling, and data entry. Synchronous time zones are one of the drivers for US firms that outsource work to Central or South America. Furthermore, access to skills and scale are two factors that clients consider in their assessment of attractive locations. In this regard, Brazil has the advantage of a large population, the innovative creativity of its engineers, and government programs supporting the outsourcing industry, while Chile and Uruguay, for example, have exploited their time-zone advantages, back-office proficiencies, and government incentives to attract outsourcing work (Brown-Wilson Group Inc,. 2008).

While South America is emerging as an attractive destination for offshoring and offshore-outsourcing, Willcocks and Lacity (2009) also predict

that in the coming years, organizations from Western Europe will increasingly source IT and businesses services to providers located in Central Eastern Europe (CEE). Among the key drivers of such a trend are the closer proximity to the supplier, limited time zone differences, and lower transaction costs than those incurred through using Asian alternatives. Within CEE there are specific cities that have been considered particularly attractive for sourcing (e.g. Budapest and Sofia).

In sub-Saharan Africa, several countries are actively seeking to become players in the global ITO and BPO markets. These countries have quickly established their economies partly on the competitiveness of IT and IT services, for example, Botswana and Kenya (Brown-Wilson Group Inc., 2008). Another example is South Africa, which is exporting IT and BP services primarily to UK-based clients, because of similar time zones, cultural similarities, English-speaking capabilities, and a good infrastructure. Mediterranean North Africa already exports IT services to Europe. For example, Moroccan IT suppliers are attractive for clients in France because of the common language, similar time-zone, and cultural capability.

Criteria for selecting locations

Selecting location is one of the major challenges organizations face when making offshoring and outsourcing decisions. A decision to re-locate business function or set up a new captive facility (for clients) or delivery center (for suppliers) abroad is based to a great extent on the attractiveness of the sourcing locations. However, in some outsourcing decisions, while the attractiveness of the location is of importance, it is no less important to consider the attractiveness of the suppliers. This is mainly because some suppliers, though they are associated with a particular location (e.g. TCS with India), have a global presence, which can be a factor that a client would appreciate far more than the home-base advantages of the supplier. We discuss supplier evaluation and selection criteria in detail in Chapter 6.

Several frameworks for selecting offshoring and offshore outsourcing destinations have been offered in the existing academic and professional literature. These frameworks have been designed to help managers assess the attractiveness of countries and regions. All of these frameworks consider costs, business environment, availability of labor resources, and specific skills. Some frameworks (e.g. Carmel's (2003) eight factors and Farrell's (2006) six factors, discussed below) are more detailed than others

(e.g. A.T. Kearney Global's[1] three factors, shown in Table 3.1) in terms of the factors they consider when comparing potential sourcing locations.

In our view, the most effective frameworks are the six factors identified by Farrell (2006), which include costs, skills, quality of infrastructure, risk profiles, business and living environment and market potential. We discuss these factors below and provide an example of how each of these factors can be used to compare the attractiveness of several non-BRIC Tier 2 countries for the sourcing of IT services and BPO. The countries we compare below are CEE countries, such as Romania, Bulgaria, Poland, Slovakia, Czech Republic, and Belarus; Egypt, Morocco, and Tunisia in the Middle East and Africa; Costa Rica and Venezuela in the Americas; and several Asian countries, such as Vietnam, the Philippines, and Thailand.[2]

Factor 1: Costs

Companies considering outsourcing IT or business processes typically compare a range of costs, including *labor costs* (average wages for skilled workers and managers), *infrastructure costs* (unit costs for telecom networks, Internet access and power, office rent), and *corporate taxes* (tax breaks and regulations and other incentives for local investment) across potential outsourcing locations. In addition, they are now also looking at value added dimensions for how they might benefit over time.

Example: Comparing costs

Among the 14 countries compared (see above the list of countries), the highest salaries are in CEE. Within CEE, salaries in Slovakia are lower than in Poland and Czech Republic, although those are still significantly lower than in the rest of the EU. This situation is, however, beginning to change as markets change and the skills-base further develops within particular economies. As a result, costs within these countries are increasing more rapidly than in Asia. A contributing

[1] http://www.atkearney.com

[2] See detailed country comparison in the report by Willcocks, L.P., Griffiths, C. and Kotlarsky, J. (2009), "Beyond BRIC. Offshoring in non-BRIC countries: Egypt – a new growth market." The LSE Outsourcing Unit report. LSE, London.

factor to this is that the property prices in CEE vary significantly: in some places, such as Prague, monthly rent is on par with any other Western city. Typically, the rent of commercial space in high-tech business parks located nearby a capital or major city is significantly higher than in the more remote business parks, as well as prime locations within major cities being more expensive than the outskirts. As a result, secondary locations are emerging in CEE countries (e.g. Katowice, Poznan, Wroslaw), which are close to major universities to ensure a supply of skilled graduates and yet benefit from the relatively lower property prices.

Labor costs in Morocco are higher than in Tunisia and Egypt but lower than in CEE, and about half of the costs of white-collar employees in France. In Tunisia, operation costs are about 20% lower than in Morocco. In Egypt, wages are about half of those in Morocco and the rent of commercial space in business parks (called "smart villages") is significantly lower than in CEE while being on par with those in Asia (e.g. the Philippines). For example, the rent of one square meter of office space in Egypt is US$ 180, in India it is US$ 220, in Philippines US$ 184, and in Bulgaria US$ 239.[3]

Labor costs in Asia are lower than in all the other countries we have compared, with Vietnam being the cheapest (wages are half or less than the average wages of Indian developers).

The costs of the telecommunications infrastructure and Internet are relatively low in all the countries compared, with the exception of Vietnam which has state-owned monopolies to control Internet access. This keeps the costs artificially high. International phone lines in Vietnam are among the most expensive in the world.

Most CEE countries (apart from Poland where incentives are not as high as in the other CEE countries) are offering preferential tax policies and support for investment. More investment incentives have been introduced recently in Bulgaria and Slovakia. The Slovak government, for example, has introduced a new act on investment aid, allowing grants and income tax relief for IT and shared services centers in the country. The Romanian government is trying to attract and retain IT talent by exempting IT professionals from income tax payment.

[3] A. T. Kearney 2007 Global Service Location Attractiveness Index

Currently, the governments of countries in the Middle East and Africa, Asia and the Americas offer even higher incentives than CEE countries. Some provide complete tax exemption. For example, the Philippines offers a 4–8 year "income tax holiday," Tunisia offers tax exemptions on the export of IT-enabled services and Morocco offers full exemption for five years and a 50% reduction in the future.

Factor 2: Availability of skills

This factor includes *skill pool* (size of labor pool with required skills) and *vendor landscape* (size of local sector providing IT services and other business functions). Required skills may include technical and business knowledge, management skills, languages, and the ability to learn new concepts and to innovate.

The scalability of labor resources in the long term (i.e. the ability to supply sufficient labor resources to handle growing demand) is a major issue to consider while deciding on a sourcing destination. An indication of the scalability of labor resources is the growth in the number of graduates with desired skills that the examined country is able to produce each year. Countries that offer scalability of labor resources are also more likely to keep wages relatively low due to a constant supply of graduates.

For companies considering expansion to offshore or nearshore locations it is important to evaluate the gap between desired and available skills. Furthermore, such companies should assess the efforts by various stakeholders to bridge such skill gaps, for example, through various specialized in-house training programs.

On the other hand, for clients looking to outsource IT or business processes it is imperative to evaluate the vendor landscape in terms of the skills-set (or capabilities) and competencies of vendors. In this regard, clients should assess each vendor's ability to respond to the customer's ongoing needs (i.e. a *delivery competency*), to radically improve service both in terms of quality and cost (i.e. a *transformation competency*), and to be willing and able to align its business model to the values, goals, and needs of the customer (i.e. a *relational competency*). Countries that have suppliers able to demonstrate such competencies to clients are in a better position to attract clients looking to outsource high-value complex,

knowledge-intensive, and strategic activities. The vendor landscape combines both local vendors and international suppliers that have a presence in the country (e.g. have set up a delivery center). The maturity of vendors in a country can be assessed based on twelve capabilities that are grouped into three key areas of competencies (these capabilities and competencies are discussed in detail in Chapter 4 and their role in selecting vendors in Chapter 6).

Example: Comparing availability of skills

The education systems in CEE countries have developed extremely well: very strong in sciences, technology, and engineering and accessible to the vast majority of the population. In the communist times, secondary education was made compulsory for the entire population of these countries. In contrast, in the Middle Eastern, African, Asian, and American countries that we have examined, a large part of the population still lives in rural areas and is not well-educated. The level of literacy in these countries is significantly lower than in CEE countries. Therefore, while CEE countries are on average much smaller in population than Egypt, the Philippines, Venezuela, Thailand, Vietnam, and Morocco, the percentage of their population that is being educated and is becoming a highly skilled workforce is much higher.

While CEE countries have a highly skilled workforce with technical skills and training in research and applied sciences, the labor pool of CEE countries is limited. For example, Poland, the biggest CEE country with the biggest labor pool in CEE, has only 40,000 graduates per year, while Egypt has 330,000 graduates (from all disciplines) per year; however, only 31,000 of them with technology, science, and engineering degrees. Likewise, the Philippines has 380,000 graduates each year, with only 15,000 of them focused on technology studies. The main difference in the skills base that Egypt and the Philippines are offering is in the variety of languages (English being the main language offered by the Philippines, and a variety of European languages offered by Egypt). The impact of this continuous stream of well-educated graduates is that, unlike in the countries where they are a scarce resource, such an annual supply of talent ensures stability in labor

costs, and a choice of skills and languages for local and international labor markets.

While some countries have developed specific language skills (Morocco) or technology-related knowledge (Vietnam), one key challenge that all 14 countries examined face is the lack of management skills; in particular, project management. Vendors from these countries tend to solve this problem by retaining management roles with the Western client or partner.

Factor 3: Environment

This factor considers *governance support* (policy on foreign investment, labor laws, bureaucratic and regulatory burden, level of corruption), *business environment* (compatibility with prevailing business culture and ethics), *living environment* (overall quality of life, prevalence of HIV infection, serious crime per capita), and *accessibility* (travel time, flight frequency, time difference).

Example: Comparing environments

Governments try to attract foreign investment, therefore some offer special development zones such as the "free trade zone" in Egypt, "offshore programing zone" in Belarus, or "nearshore center" in Morocco. These free trade zones offer tax breaks, less complex administrative procedures and, in some cases, more flexible labor rules. However, while such an investment incentive might be appealing to Western firms, corruption is still a problem in many of the second and third Tier countries. The European Union, for example, has been monitoring corruption in its member states to ensure that local governments also fight this phenomenon.

In terms of business environment, CEE countries are the most attractive destinations for European companies looking to outsource

or nearshore business processes or services. Culturally, CEE countries provide a good fit with Western cultures, time-zone difference is limited, and most destinations are easily accessible either by air or even ground transportation.

Countries in Asia and the Americas would require longer commutes and offer wider time-zone differences for clients based in Europe. For call centers that operate 24 hours and 7 days, time-zone differences do not necessarily create major challenges; however, for offshore-outsourcing projects that involve software development and the collaboration of globally distributed teams, time-zone differences may result in coordination challenges.

For North American clients, CEE countries provide a reasonable cultural fit; however, in terms of travel time and time-zone differences these countries are too remote and the alternative destinations, such as Central America or the Caribbean countries, are more attractive.

In terms of the living environment, this factor mainly affects the attractiveness of the outsourcing destination for expatriates. Such a scenario is particularly common in those cases where the client establishes a presence in the destination country in the form of a captive center or as a support provided to the vendor's service team. In this regard, CEE countries, where the standard of living is relatively high and cultural fit with Western countries is reasonable, are most attractive for expatriates. Vendors from countries which are less attractive to expatriates have been attempting to expand their presence in Western countries. For example, there is a large Vietnamese expatriate community living and working in developed IT markets worldwide, providing a connection between Western customers and Vietnamese developers and helping to reduce cultural and language barriers.

Factor 4: Quality of infrastructure

Quality of infrastructure includes *telecommunication and IT* (network downtime, speed of service restoration, connectivity), *real estate* (availability and quality), *transportation* (scale and quality of road and rail network), and *power* (reliability of power supply).

Example: Comparing quality of infrastructure

CEE countries are rapidly catching up with Western European countries in terms of the quality of telecommunications and IT infrastructure. Bulgaria, Czech Republic, and Slovakia, for example, have an excellent telecommunication infrastructure. In Romania the domestic telecom infrastructure is still poor but improving. The Romanian government aims to transform Romania to become the "Internet hub" of the Black Sea region. In the past few years the country has witnessed one of the largest growths in mobile communications in Europe.

In contrast to CEE, where the quality of telecommunications and IT infrastructure is comparable across the countries, in non-CEE countries the availability and quality of telecommunications and IT infrastructure vary significantly. It is common to find that there will be an advanced IT infrastructure in business parks and large cities, but no or a limited IT infrastructure in rural areas. For example, Tunisia has a large number of high-tech parks (called "Technopoles") with state-of-the-art IT infrastructure and telecoms facilities, while Morocco has a better telecoms infrastructure than Tunisia but only in special development zones. The Philippines stands out as having a particularly good telecoms infrastructure with a reliable domestic and inter-island service as a result of the US establishing its military bases there. In Vietnam, where telecommunications and power need improvement, infrastructure is the major barrier to the growth of IT in the country.

Transportation systems in CEE are considered to be advanced, as compared with other regions. Roads in CEE are in fairly good condition and most public transport systems consist of rail, metro, and buses. Countries in Asia, Middle East, and Africa, and the Americas have developed transportation infrastructures around those areas where a workforce with the required skills is available, and often only near to international airports and major cities. Such "high-tech islands," often surrounded by slums or a desert, provide a high-quality IT infrastructure, have better roads, and offer high-quality office space and other facilities (e.g. cafeterias, fitness facilities). However, the workforce in these countries mainly relies on private transportation, most typically company buses that

collect staff in the morning and take them back at the end of the working day. Western visitors typically need a car and a driver to get around. This situation, which seems rather negative compared to CEE, is not different from India in any respect and does not prevent Western counterparts from visiting local facilities. There are hotels or company-owned houses that offer high-quality living standards for visitors from the West. Companies own cars and employ drivers (and interpreters if needed) to ensure that the transportation and communication needs of foreign clients or staff are satisfied. Such "green-house" arrangements for living and working compensate for the poor transportation system and infrastructure in the rest of the country.

Factor 5: Risk profile

This factor assesses *security* issues (risks to personal security and property-related issues such as fraud, crime, and terrorism), *disruptive events* (risk of labor uprising, political unrest, natural disasters), *regulatory risks* (stability, fairness, efficiency of legal framework), *macroeconomic risks* (cost inflation, currency fluctuation, and capital freedom), and *intellectual property risk* (strength of data and IP protection regime).

Example: Comparing risk profile

CEE countries, in particular those which have recently joined the European Union, have been considered by Western partners as more safe to live in and visit than the countries in the Middle East, Africa, or some countries in Asia and some in the Americas. The Czech Republic, for example, is considered one of the most stable post-communist countries. Furthermore, CEE countries have suffered less from natural disasters than countries in Asia and the Americas. For example, flooding in Prague in 2002 caused minor damage compared with the damage caused to Thailand and its population following the 2004 earthquake in the Indian Ocean which hit Thailand through a series of devastating tsunamis.

Terrorist attacks also affect the attractiveness of a country for trade to the business community. For example, Egypt's image has been damaged as a result of the rare terrorist attacks on the resorts of Dahab in April 2006 and Sharm El Sheikh in July 2005. There is a perception in some quarters, notably the US, that Egypt is unsafe, which obviously affects the choice of business destination. The Egyptian government is trying to reverse this perception by enforcing security measures, with cars and packages being thoroughly checked and people being searched for weapons or explosives on the entry to office buildings and hotels. In fact, the recent survey of 448 outsourcing users by Black Book Research rated Cairo as the world's 10th safest outsourcing city in 2008. Cairo was preceded by Singapore, Dublin (Ireland), Santiago (Chile), Krakow/Warsaw (Poland), Toronto (Canada), Prague/Brno (Czech Republic), Budapest (Hungary), Monterrey (Mexico), and Beijing (China). When it came to the most dangerous outsourcing locations, the survey listed Jerusalem (Israel), Mumbai (India), and Rio de Janeiro/Sao Paolo (Brazil) as the top three. This survey was conducted a month before the Mumbai bombings.[4]

There are issues concerning piracy, Intellectual Property Rights (IPR) protection, and copyright laws that affect country attractiveness for trade and outsourcing. In Venezuela, for example, the software piracy rate is above 80%. Vietnam, which has a stable and secure environment, is known for its extensive illegal copying of software and a culture of software piracy. In CEE, Poland and Romania are known for piracy and for a lack of IPR protection. Many governments, including Romania, Costa Rica, and the Philippines, are taking steps to strengthen and enforce IPR protection and copyright laws. In Poland, however, the government does not make a great effort to fight piracy.

Factor 6: Market potential

Market potential can be assessed based on the *attractiveness of the local market* (current GDP and GDP growth rate) and *access to nearby*

[4] Financial Week, December 11th, 2008.

markets (in the host country and adjacent region). This may take one or more forms:

- as a captive operation using local labour, infrastructure and resources;
- as an outsourced operation using local IT service suppliers;
- as an ITO/BPO supplier to organisations based in the host country and nearby region.

Example: Comparing market potential

Looking at the CEE countries, the Czech Republic and Poland stand out as countries with notable market potential. Each already has US$ 500 million a year in revenues from ITO/BPO service exports. They are attractive both as captive and outsourcing locations. While the Czech Republic has language and cultural compatibility with Western European companies as well as good infrastructure, its low wages are rising, as are property costs, and it has a low level of service maturity. Its main threats are other CEE countries that will also seek to penetrate further into the adjacent Western European market. Poland is also a strong nearshore destination for Western European companies and is strong in R&D and infrastructure, with a well-educated if small-sized IT workforce. It faces similar threats and opportunities as the Czech Republic. Romania has a smaller market potential and starts at a lower base – some US$ 100 million from ITO/BPO exports in 2008. It has attractive cost competitiveness and strong software development capability, but a small labour pool that needs more investment in IT skills and education.

In terms of ITO/BPO services, the market is growing as CEE countries become more "Western" and the quality of life in these countries moves toward those of Western European countries. Local CEE demand for software and IT-related products and services is expected to continue growing, which means that Western European companies already present in CEE are able to take advantage of their good access to such markets.

At present, the Middle East and Africa are less attractive than CEE for Western European companies, partly because of a lack of knowledge and partly because of perceived language and cultural differences. However, this is changing with Morocco and Tunisia focusing on

French (and Spanish) speaking countries to attract potential clients and Egypt targeting Western European and US clients through its multi-lingual workforce.

In the Asian countries, in particular Vietnam and the Philippines, demand for software and IT-related products and services from the local market is growing, but much more slowly than in CEE. This demand mainly comes from the major cities.

The A.T. Kearney Global Locations Index shown in Table 3.1 illustrates a different approach to assessing the attractiveness of a location for outsourcing and offshoring. Their approach provides a score for each factor (e.g. financial, people, and business attractiveness), which are summed up to create a final score. We believe that a qualitative assessment should be combined with a quantified approach to decide on the attractiveness of a location for outsourcing.

Finally, while comparing potential sourcing destinations, it is imperative to consider the influence of certain cities on such a decision. The rationale for this is that costs, availability of skills, and infrastructure may vary quite significantly across cities within the same country. Even factors such as environment, risk profile, and market potential can present varying results when examined in each city of the same country. The Global Services Tholons Report (2008) by Vashistha and Khan argues that comparing countries is superficial because "no two cities of a country would be at the same level of skills maturity or offer the same cost advantage." For example, some cities graduate more engineers, others more accountants. Therefore, sourcing decisions would be more accurate if these assess the attractiveness of potential locations such as cities rather than countries.

One approach to assessing the attractiveness of cities for outsourcing is proposed by Farrell (2006), in which the scale and quality of workforce, business catalyst, cost, infrastructure, risk profile, and quality of life are among the more critical factors. Vashistha and Khan (2008) have compared a large number of cities and have come up with a list of the top eight global outsourcing cities, six of them in India, Dublin in Ireland, and Makati City in the Philippines. They also found out that among the top 50 emerging global outsourcing destinations, Cebu City in the Philippines, Shanghai and Beijing in China, Ho Chi Minh City in Vietnam, and Kraków in Poland are the top five on this list.[5]

[5] The full list is included in the report available from www.globalservicesmedia.com

Table 3.1 A.T. Kearney global services location index, 2007

Rank	Country	Financial attractiveness	People and skills availability	Business environment	Total score
1	India	3.22	2.34	1.44	7.00
2	China	2.93	2.25	1.38	6.56
3	Malaysia	2.84	1.26	2.02	6.12
4	Thailand	3.19	1.21	1.62	6.02
5	Brazil	2.64	1.78	1.47	5.89
6	Indonesia	3.29	1.47	1.06	5.82
7	Chile	2.65	1.18	1.93	5.76
8	Philippines	3.26	1.23	1.26	5.75
9	Bulgaria	3.16	1.04	1.56	5.75
10	Mexico	2.63	1.49	1.61	5.73
11	Singapore	1.65	1.51	2.53	5.68
12	Slovakia	2.79	1.04	1.79	5.62
13	Egypt	3.22	1.14	1.25	5.61
14	Jordan	3.09	0.98	1.54	5.60
15	Estonia	2.44	0.96	2.20	5.60
16	Czech Republic	2.43	1.10	2.05	5.57
17	Latvia	2.64	0.91	2.00	5.56
18	Poland	2.59	1.17	1.79	5.54
19	Vietnam	3.33	0.99	1.22	5.54
20	United Arab Emirates	2.73	0.96	1.92	5.51
21	United States (tier two)	0.48	2.74	2.29	5.51
22	Uruguay	2.95	0.98	1.54	5.47
23	Argentina	2.91	1.30	1.26	5.47
24	Hungary	2.54	0.95	1.98	5.47
25	Mauritius	2.84	1.04	1.56	5.44
26	Tunisia	3.03	0.90	1.50	5.43
27	Ghana	3.27	0.90	1.25	5.42
28	Lithuania	2.60	0.83	1.98	5.42
29	Sri Lanka	3.18	0.96	1.22	5.36
30	Pakistan	3.23	1.00	1.11	5.34
31	South Africa	2.52	1.18	1.60	5.30
32	Jamaica	2.83	0.96	1.49	5.29
33	Romania	2.88	0.87	1.53	5.28
34	Costa Rica	3.00	0.86	1.36	5.22
35	Canada	0.77	2.09	2.30	5.16
36	Morocco	2.92	0.90	1.33	5.14
37	Russia	2.61	1.38	1.16	5.14
38	Israel	1.97	1.27	1.86	5.10
39	Senegal	3.19	0.82	1.05	5.06
40	Germany (tier two)	0.46	2.19	2.40	5.05
41	Panama	2.88	0.75	1.40	5.02
42	United Kingdom (tier two)	0.50	2.16	2.35	5.01
43	Spain	1.18	1.71	2.06	4.95
44	New Zealand	1.53	1.12	2.25	4.91
45	Australia	0.89	1.69	2.31	4.89
46	Portugal	1.59	1.14	2.11	4.84
47	Ukraine	2.76	0.99	1.09	4.83
48	France (tier two)	0.45	2.07	2.27	4.79
49	Turkey	2.06	1.31	1.41	4.78
50	Ireland	0.40	1.54	2.29	4.18

Note: The weight distribution for the three categories is 40.30.30. Financial attractiveness is rated on a scale of 0 to 4, and the categories for people and skills availability, and business environment are on a scale of 0 to 3.

Source: A.T. Kearney (2007)

Nearshoring and beyond

As mentioned in Chapter 1, "nearshoring" is an activity in which a client outsources work to a supplier located in a foreign low-wage country and yet the vendor is close in distance and in terms of time-zone differences. Compared to offshore outsourcing, the benefits of nearshoring include lower travel costs, fewer time-zone differences, and closer cultural compatibility. Canada, for example, is a significant nearshore destination for US clients. Indeed, some analysts argue that US clients can have lower costs when nearshoring work to Canada as compared with the strategy to offshore-outsource to India (Willcocks and Lacity 2009).

In their study of nearshoring, Carmel and Abbott (2007) argue that distance still matters and point to customers choosing the nearshore option to gain benefit from one or more of the following constructs of proximity: geographic, temporal, cultural, linguistic, economic, political, and historical linkages. Their study identifies three major global "nearshore clusters" based around clients in (i) North America, (ii) Western Europe, and (iii) a smaller cluster in East Asia as illustrated in Table 3.2 below.

Table 3.2 Global distribution of nearshore destinations and their division into three clusters

	Client cluster in North America	**Client cluster in Western Europe**	**Client cluster in East Asia**
Client location only	USA	EU13 Norwey Switzerland	Japan Singapore
Both Client and Offshore/ Nearshore location	Canada	Ireland Spain Israel Russia	Korea
Nearshore only	Mexico Guatemala El Salvador Nicaragua Costa Rica Panama Honduras Colombia Guyana Venezuela Peru Brazil Chile Uruguay Argentina Bahamas Jamaica Dominican Republic Puerto Rico Barbados	Poland Hungary Czech Republic Slovenia Bulgaria Romania Armenia Ukraine Belarus Morocco Algeria Tunisia Egypt South Africa Turkey Malta Cyprus	China Malaysia

Source: Based on Carmel and Abbot (2007)

Nearshoring represents a major way in which non-BRIC countries can compete with India for market share. The top Indian firms now offer a location menu of choices to their clients, which mitigates some of the currency costs incurred in uncertain markets. For example, India-based TCS can offer its British clients services that are farshore (India), nearshore (Budapest, Hungary), and onshore from their offices in London, Nottingham, or elsewhere (Oshri et al. 2007). Another Indian firm, Infosys, has "Proximity Development Centres" and like other Indian firms has also refined its internal processes in mitigating time-zone difficulties (Carmel and Abbott, 2007).

Willcocks and Lacity (2009) argue that, in addition to the continuing nearshoring trend, there is what can be called a "bestshoring" trend. The concept of bestshoring can be explained through the example of the outsourcing contract between TCS and ABN AMRO discussed by Oshri et al. (2007). In this contract TCS provides IT services to the bank from offshore locations (Mumbai and Sao Paulo), from nearshore locations (Budapest and Luxembourg), and from an onshore location (Amsterdam). In other words, the client and the vendor assess the most appropriate location to provide services based on some of the criteria outlined above (e.g. availability of skills, language, cost). Our research suggests that more clients and suppliers are increasingly moving to such an arrangement for either insourced or outsourced IT and business services (Oshri et al. 2007).

We believe that nearshoring in the coming years is less likely to dominate the offshoring strategy. In our opinion, nearshoring will be only one component within the bestshoring strategy. According to Willcocks and Lacity (2009), locations in CEE and Mediterranean Africa will be attractive to Western European and Gulf States clients, those in Asia Pacific to China, India, and Japan, and those in Central and South America to North America. Shared language, culture, and/or history will continue to influence purchasing decisions. Clearly, also the BRIC countries themselves are increasingly interested in non-BRIC services and locations.

Summary

This chapter provided an extensive review of the factors that affect country attractiveness for outsourcing and offshoring. By using numerous examples, the chapter illustrated the comparative advantage of certain locations; however, within the context of the nature of the function outsourced. As such context change, the attractiveness of a location may change as well.

Relevant teaching cases

Carmel E. (2007), *"PanGenesis: A Creative Costa Rican Approach to the Persistent IT Labor Crunch,"* available in this book.

Vietor, R.H.K., Rivkin, J.W., and Seminerio, J. (2008), *"The offshoring of America,"* Harvard Business Online, reference number: 9–708-030.

CHAPTER 4

Supplier's core capabilities and strategies for sustainability and growth

Introduction

As has been more extensively illustrated in Chapter 1, the global sourcing market is large and the services it offers range from relatively simple processes or call centers to the radical transformation of entire back-office functions. The supplier base is equally diverse, ranging from locally based firms that specialize in particular services and/or industries to offshore or global providers that promise to offer a high quality of service at a low cost.

To obtain an indication of the dominant players in the sourcing market, Table 4.1 presents us with the top ten ITO vendors, Table 4.2 with the top ten BPO vendors and Table 4.3 illustrates the top ten global outsourcing vendors.

These rankings can provide important information regarding the expertise of a number of vendors and thus help clients identify potential partners for cooperation. Note, however, that we can expect these rankings to be quite dynamic as existing, developing and new players compete increasingly across global geographies.

This chapter provides an overview of suppliers and intermediaries. Vendor landscape will therefore be discussed in terms of the firm size, areas of specialization, and their location. The chapter focuses on supplier's core capabilities and discusses supplier's strategies for sustainability and growth.

In this chapter, we will focus on the following aspects:

- the role of suppliers and intermediaries in sourcing arrangements;
- supplier's core capabilities for sustainability and growth;
- vendor's strategies for growth.

Table 4.1 2008 top ten Information Technology Outsourcing companies

2008 Rank	Company
1	Perot Systems
2	CSC
3	Unisys
4	EDS
5	Hewlett Packard
6	Tata Consultancy Services
7	Cognizant
8	Satyam
9	Accenture
10	CIBER

Source: The black book of outsourcing

Table 4.2 2008 top ten Business Process Outsourcing companies

2008 Rank	Company
1	Genpact
2	Satyam BPO
3	Wipro
4	HCL BPO
5	Logica
6	IBM Global
7	24/7 Customer
8	MphasiS
9	Tech Mahindra
10	WNS Global

Source: The black book of outsourcing

Table 4.3 Top 100 global outsourcing vendors

Rank	Company (Leaders)	Key strength
1	Accenture	Customer testimonials
2	IBM	Size and growth
3	Infosys Technologies	Executive leadership
4	Sodexo	Global presence
5	Capgemini	Achievement recognition
6	Tata Consultancy Serivces	Employee management
7	Wipro Technologies	Employee management
8	Hewlett-Packard	Outsourcing experience
9	Genpact	Executive leadership
10	Tech Mahindra	Outsourcing experience

Source: IAOP

Overview of vendors and intermediaries

In addition to choosing a supplier who specializes in a particular line of services, it is of vital importance to choose the right configuration for the outsourcing arrangement. The different configuration options for the client include the *sole supplier* model, the *best of breed* model, the *panel* model, and the *prime contractor* model. More specifically:

Sole supplier: This configuration involves a single supplier providing the entire service. The main benefit of this model is the sole accountability of the supplier, which makes the governance of the venture easier relative to other configuration models. Its main risk is associated with the high danger of compromising service quality, as no one supplier is outstanding in all areas.

Best of breed: In this configuration, the organization has a number of suppliers and plays the role of the head contractor itself. Willcocks et al. (2006) have emphasized that this type of configuration constitutes a low-risk outsourcing option and has become a prevalent outsourcing model. According to their research findings, 75% of UK and 82% of US organizations use this type of configuration as an approach to mitigate outsourcing risks.

Panel: In this arrangement, there is a list of preferred suppliers who work in continuous competition. Every supplier constantly competes for a project or a contract. This approach is very common in application development, hardware purchasing, and consulting, as the requirements differ from one initiative to another and thus it makes more sense for the client firms to have a list of preferred suppliers and call them for the sort of work they would be more competent for.

Prime contractor: A prime contractor configuration consists of a network with several suppliers which operates under the control of the head contractor. The head contractor is accountable for the delivery of the service and liable for this under the terms of the contract. The sub-contractors are firms who have superior expertise in a specific area relative to the head contractor, who operate in regions in which the head contractor does not, or who offer a combination of both of these factors (i.e. superior expertise and geographic coverage).

It is important to note that in every outsourcing venture there are SLAs that specify the level and quality of service that the supplier has to deliver. The supplier is contractually obliged to adhere to the SLA specifications. If it does not, there is a high risk that it will have to suffer the imposition of service credits. In the case of multiple-supplier settings, there are operational level agreements to ensure that each supplier is aware of the

commitments of other suppliers. This issue will be further discussed in Chapter 8.

While competition for cost arbitrage in the global sourcing market is growing, offshore intermediation is gaining momentum as a tactic for managing the complexity of offshoring ventures. Mahnke et al. (2008) explain the value of intermediation in outsourcing and offshoring and provide an overview of services that intermediaries offer to clients and vendors. More specifically:

1. The mitigation of cultural disparities has been identified as the first major function for offshore intermediaries. Cross-cultural tensions (i.e. differences in language, organizational practices, and so forth) cause much turbulence in offshoring ventures. If an outsourcing firm does not understand and manage cross-cultural differences and the tensions that arise because of them, substantial conflicts are likely to emerge and reduce the benefits of the venture. Along these lines, an intermediary with experienced staff and managers who are aware of the cultural specifics of both regions can more easily foresee and manage the tensions that arise as a result of different communication styles.
2. The mitigation of cognitive distance has been identified as the second function of offshore intermediaries. Cognitive distance can result from different mindsets, different ways of thinking, processing information, and communicating. More often, in the offshoring context, cognitive distance arises when relatively lesser-skilled clients attempt to exploit the high technological expertise of an offshore vendor at a relatively lower cost. This is a major area where an offshore intermediary can add value. In particular, the offshore intermediary may offer services such as specialized translations between perceived client needs and vendor requirements, and codified interfaces so that systems can be connected and contracts can be designed and managed. Furthermore, intermediaries can contribute to the creation of sufficient common ground to facilitate mutual understanding and avoid conflict.
3. A comprehensive preparation of the client for an offshoring venture is the third major function of offshore intermediaries. A number of offshoring ventures have generated disastrous results because the client lacked knowledge, experience, and maturity in offshore vendor selection and negotiations. The offshore intermediary can help an organization to be prepared for offshoring ventures in a number of ways, including creating awareness of offshoring objectives, establishing common expectations with the vendor, as well as contributing to contract formulation and negotiation.

4. Facilitating and managing the ongoing relationship between the client and the offshore vendor is the fourth major function of offshore intermediaries. Offshore relationships are not static, and relative to domestic ventures they are more prone to unforeseen situations and contingencies. Especially in offshoring ventures in which project outcomes are hard to identify (and thus the performance of the vendor is more difficult to measure), the role of offshore intermediaries is key. More specifically, the offshore intermediary can contribute significantly to the detection of misunderstandings and the resolution of conflicts. Furthermore, it can create relational awareness by generating mutual understanding, clarifying implicit assumptions, and defining a common vocabulary from which joint future action can proceed. Finally, the intermediary may, if necessary, work with the client to make sure that appropriate communication structures are in place so that the interfirm governance mechanism can be tailored to relational requirements.

A number of consultancies (e.g. Deloitte, TPI) and legal firms (e.g. DLA Piper, Berwin Leighton Paisner) play the role of intermediaries in outsourcing ventures and provide their services in domestic and offshore operations. Their services range from strategy consulting, program management, and change management to contract design, contract management, and dispute resolution.

The core capabilities of suppliers

While supplier configuration is highly significant for the outcome of the venture and firms must analyze extensively which model fits best to their purposes, another critical area for consideration is the actual capabilities and competencies that the selected supplier(s) can demonstrate.

Levina and Ross (2003) have provided a useful categorization into three classes of supplier's capabilities. These include:

1. *Client-specific capabilities:* These are related to the relational routines and resources that align the vendor's practices and processes to the client's goals. More specifically, these capabilities are associated with the knowledge that a vendor must have of the client's business model and industry as well as of the specifics of the client's operations.
2. *Process capabilities:* These are concerned with task delivery routines and resources that accomplish software design, development, and execution. Six Sigma and the Capability Maturity Model (CMM) are some

of the more well-known methodologies which aim to improve software development processes.

3. *Human resource capabilities:* These are related to recruitment, training and mentoring practices, designing jobs that will expose individuals to a variety of tasks and thus enable them to broaden their skills, as well as developing performance appraisal and compensation systems.

Feeny et al. (2005) have attempted a deeper analysis and have identified 12 key supplier capabilities (shown in Figure 4.1) that clients should take into account when looking for a vendor:

1. *Leadership:* Leadership refers to the capability of delivering the desired result throughout the deal. Feeny et al. noted that according to their research, individuals who occupied supplier leadership roles had a considerable impact on the success of an outsourcing venture. More specifically, the authors found that although individual supplier firms were consistent in the way they contracted and governed, 76% of the deals under study were identified by the interviewees as successful and 24% were seen as unsuccessful. The main differentiating factor between success and failure was the individual leading the supplier account teams. Feeny et al. (2005) additionally suggested that when examining how these leaders could generate a difference to the outsourcing result, three patterns emerged. First, in unsuccessful cases, the leader of the supplier team was often seen to be too much focused on business management issues (i.e. delivery, meeting SLAs while delivering the required profit margin to the vendor, and so forth) which, although important, are distinct from leadership. Second, the quality of the relationship between the leaders of the supplier's and the client's teams exerts an impact on the wider client-supplier relationship. Third, the relationship between the leader of the supplier's team and the top management of the supplier's organization can be a critical success factor. Because most suppliers tend to create more of a front-end team rather than a full-function business unit when serving a client, the local team is extremely dependent on its leader's relationship with headquarters to gain access to key resources and approval for client-aligned business policies.
2. *Business management:* This is the capability to deliver products and services according to the agreement and the business plans of both parties. If either of the two parties is dissatisfied with the sourcing arrangement, this will inevitably lead to the failure of the venture. Very often clients appear to forget this and try to fully exploit their power position

at the expense of the vendor. However, this tactic erodes the relationship and undermines the sourcing result. As the contract manager of an Australian public sector agency noted: "Suppliers have to make a reasonable margin to stay in business. You don't want them to lose money because the worse their business gets, the worse your business gets." (Feeny et al. 2005:44)

3. *Domain expertise:* This is the capability to retain and apply professional knowledge. The key issue here is not only the supplier's technical expertise or know-how, but also the ability to understand and manage the business needs of the customer. A number of suppliers acquire domain expertise by transferring employees to the client's site. For example, Deutsche Bank moved its procurement people to Accenture and Barclays transferred check-processing staff to Unisys. Such arrangements have two advantages for the customers. First, it becomes the supplier's responsibility to adjust capacity and use the best people. Second, both parties are reassured that the operating staff not only have the required expertise (i.e. in the procurement or the HR domain), but also have a good understanding of the specifics and particularities of the client's service.
4. *Behavior management:* Behavior management refers to the ability to motivate and inspire people to deliver services of high value. It is highly significant for customers to evaluate the extent to which a supplier has acquired this capability, or in other words, how competent the supplier is in motivating and managing people to deliver service with a "front-office" culture. Different suppliers use different methods to acquire this capability. For example, CGI Group Inc. of Montreal puts employees who will be transferred to client's sites through a process which it calls "harmonization." A CGI partner explained that this process is much more than an orientation to the client. He further noted that the goal is "to show every employee – not just a subset – this is what we do, how we do it, the timing. We want to set the stage for good behaviour management beforehand, not react to bad behaviour afterwards."
5. *Sourcing:* This is the ability to access the necessary resources. This ability may take the form of the generation of economies of scale, the utilization of a superior infrastructure, or the exploitation of efficient procurement practices. For example, the procurement services deal between BAE Systems and Xchanging was based on two key areas: the superior ability of Xchanging to attract high-level professional skills for certain procurement categories (such as office suppliers, health plans and training), as well as its ability to generate economies of scale by aggregating BAE's part-time needs with those of other clients.

6. *Process improvement:* This is the capability to change processes in a way that generates a dramatic improvement. Supplier track records can be useful resources in the evaluation of the supplier's capabilities for improvement. Most clients are familiar with Six Sigma methodologies or alternatives such as CMM and are looking for these. However, it is important to look beyond such tools to consider the people and behavior aspects. Key areas for consideration include who has the critical skills? Who owns the change process? Who defines what an "improvement" is, and who benefits? It is important to note that very often, improvements appear on the surface to be targeted to the needs of the customer, but in essence, they are intended for the convenience of the supplier.
7. *Technology exploitation:* This refers to the capability of rapidly deploying new technology as it is one of the key reasons for business process outsourcing (Willcocks and Lacity, 2006). This capability requires careful evaluation from the customer's perspective and should go beyond the pure technical skills of the supplier. Significant areas for consideration include the values and behaviors the supplier brings to technology exploitation, the processes that are followed as well as the infrastructure that is used as the basis of technology exploitation.
8. *Program management:* Program management refers not only to project level capabilities, but also to the capability of delivering a set of interrelated projects. More specifically, it involves the processes of prioritizing, coordinating, mobilizing the organization, and promoting a series of tasks that aim toward change and improvement. Feeny and associates (2005) have highlighted the fact that, according to their research findings, this capability has played a major role in the client's decision to expand the use of a supplier for more projects.
9. *Customer development:* This is the capability to enable clients to become customers who can make informed choices about their business needs, service levels, and costs. Feeny et al. (2005) have suggested three steps that suppliers should take to achieve the re-orientation from user to customer. First, the supplier should establish personal contact with a number of end-users to understand what sort of service they want to use and how. This will also lead to trust development. Second, the supplier should cooperate with client managers to arrive in an agreement on the provisions of the service. Third, the supplier should work towards relationship development by which the end user becomes a customer who feels fully informed of service functionalities, options, potential enhancements, and associated costs.

10. *Planning and contracting:* In essence, this is the capability to produce beneficial results for both sides. The planning component involves envisaging potential rewards for both vendor and client and figuring out way to achieve these rewards. For example in the Deutsche Bank – Accenture outsourcing arrangement, Accenture is committed to fund and create a new platform for procurement, with 200 people assigned to its development. It expects to gain good revenue from Deutsche Bank, as well as the opportunity to attract other clients to the service. Deutsche Bank estimates that the plan will deliver 15%–20% savings through the consolidation, standardization, and restructuring of its 14 procurement units. On the other hand, the contracting component defines how rewards will be shared during the execution and delivery of the plan. Many possibilities exist. For example, the Bank of America and Xchanging structure their major deals as profit-sharing arrangements, while the Bank of America chose to take an equity stake in Exult during their HR outsourcing arrangement.
11. *Organizational design:* This is the capability required to design and implement successful organizational arrangements. Feeny et al. (2005) found that a number of major deals took approximately two years to reach a client-supplier organizational fit. The authors found that very often in offshore deals clients were experimenting with various organizational arrangements without fully understanding the suppliers design strategy. In this regard, suppliers greatly vary in terms of their organizational approach, the choices they make, and their levels of flexibility. For example, some emphasize a "thin" front-end client team, interfacing with consolidated service units (silos) that have ownership, and that have the responsibility for profit and ownership of most of the resources. While such arrangements may lead to the generation of significant economies of scale, they can limit a supplier's ability to deliver the business plan for a specific client. By contrast, other suppliers allocate most of their resources to "enterprise partnership units" that are created for each major deal. These units are responsible and accountable for the delivery of the business plan and have their own chief executives, senior executive teams, dedicated staff, and resources. Clearly, the supplier's organizational design and its fitness with the client's operational mode will affect the success of the outsourcing project.
12. *Governance:* This refers to the existence of governing processes and structures that facilitate the alignment of the client's objectives and strategies with the vendor's delivery system. Key areas for consideration

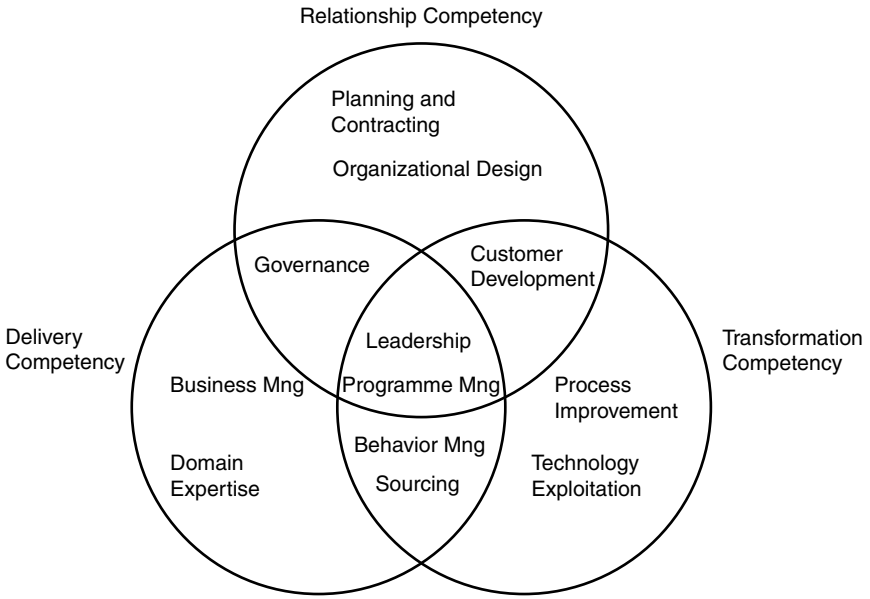


Figure 4.1 Twelve supplier capabilities

Source: Feeny et al., 1995

include what structures will be in place to ensure that the supplier is delivering according to the contract and that decision making is visible and accountable? What procedures will be initiated for dealing with escalating problems? What powers and authorities will be constituted through the governance structure?

These 12 core capabilities of the supplier can be leveraged into three key competences (Feeny et al., 2005; Willcocks and Lacity, 2006). These are illustrated in Figure 4.1 and include:

1. *Delivery competency:* This is based on the supplier's ability to respond to the customer's ongoing needs. As is illustrated in Figure 4.1, this competency primarily involves the supplier's leadership, business management, domain expertise, behavior management, sourcing, program management, and governance capabilities.
2. *Transformation competency:* This is based on the supplier's ability to deliver radically improved service both in terms of quality and cost. As is shown in Figure 4.1, this competency primarily involves the supplier's leadership, behavior management, sourcing, process improvement, technology exploitation, program management, and customer development capabilities.

3. *Relationship competency:* This is based on the supplier's willingness and ability to align its business model to the values, goals, and needs of the customer. As is illustrated in Figure 4.1, the key capabilities that this competency includes are leadership, customer development, planning and contracting, organizational design, governance, and program management. Among these, the planning and contracting capability present the major challenge, as it is not easy to align the goals and incentives of the two sides.

With regard to the management of supplier's capabilities and competencies, Willcocks and associates (2006) have identified eight key lessons that reflect on supplier's capabilities which have emerged from their 15-year research into more than 1200 organizations. Suppliers should pay attention, as these lessons could affect their ability to win outsourcing contracts:

1. During the phase of supplier selection and negotiation, the bargaining power is in the hands of the client. If the client does not use this power wisely at this point, there is a high risk that problems will occur in subsequent phases.
2. Customers need to focus on the supplier's competencies and capabilities, rather than their amount of resources.
3. Choosing the right supplier configuration is critical to the outcomes of the venture.
4. Clients should examine a supplier's capabilities and competencies in relation to the business context. Not every business context requires the suppliers to rank high in all 12 capabilities and all three competencies. In the evaluation of the suppliers, there are three sets of criteria: mandatory, qualitative, and price.
5. CEOs must understand that deals that excessively favor the client are not viable in the long run. The deals with the best outcomes are those where the client is getting the best value for a fair price.
6. Tendering is the most common and effective strategy in choosing suppliers. Joint decisions between the CEO, business executives, and IT managers are also the most effective. Going straight into negotiations without tendering or competition among the suppliers might be appropriate only for very experienced clients.
7. The more communication and transparency between the client and the potential supplier during the stage of negotiations, the better for the development of the relationship.
8. The client CEO has two fundamental roles to play. First is making sure that the right supplier is selected at the right price. Second is contributing

to the development of a relationship and ensuring that the retained organization is properly staffed so that the supplier can perform to the best of its capabilities.

Summary

In this chapter we discussed the role of the vendor and intermediaries in sourcing arrangements. A particular attention had been given to the core capabilities vendors should develop to maintain their competitive position and to ensure their ability to provide quality services to their clients.

Relevant teaching case

Burgelman R.A., and Aneesha C. (2006), "Infosys consulting in 2006," Harvard Business Online, reference number: 9-SM1–51.

CHAPTER 5

Leveraging knowledge and expertise

Introduction

What happens to knowledge when an organization outsources? Despite the rapid growth of IT outsourcing and business process outsourcing over recent years, there is still a considerable time-lapse in grasping the implications for knowledge and expertise management in these processes. Organizations often have limited understanding of how new knowledge can be created and exploited, especially when outsourced activities are considered as "non-core" services. As Willcocks et al. (2004) point out, in an increasingly commoditized outsourcing market, with evermore-demanding client companies, competing on leveraging knowledge-related value may well become the new game in town.

In this chapter, we discuss what happens to knowledge and expertise in outsourcing arrangements and how to realize benefits of knowledge creation and exploitation to achieve better performance and innovation. We mainly focus on the following aspects:

- how organizations leverage knowledge in outsourcing relationships;
- how vendor firms integrate diverse domains of expertise to facilitate knowledge transfer between onsite and offshore teams and across projects;
- what client firms learn from IT vendors.

Integrating knowledge and outsourcing strategy

Researchers find that *do-it-yourself* sourcing or using *management consultancy* are both limited in terms of leveraging knowledge assimilation and creation. Similarly, in ITO, client organizations often make inadequate investments in retaining core knowledge capabilities, which sometimes lead them to losing control over the destiny of their IT function, and can result in belated re-insourcing of these capabilities. In BPO, which is often conducted on a fee-for-service basis, knowledge implications are just as

often neglected, although they may well be disguised by improvements in real cost and service (Willcocks et al., 2004).

Quinn (1999) argues that companies should develop an integrated knowledge and outsourcing strategy to mitigate these risks. The key is to identify and build up selected areas of a company's competitive strength to a "best-in-world" level. The most effective core competency strategies focus on a few cross-functional, intellectually based service activities, or knowledge and skill sets critical to customers. Such strategies allow the company to build selective specialized capabilities and provide a flexible platform for future innovations. Quinn points out that at least one of these competencies should be related to the notion of customer and market knowledge. On such a basis, integrating knowledge and outsourcing strategy into organizational core competency strategies will enable companies to:

- focus and flatten their organizations by concentrating their limited resources on a relatively few knowledge-based core competencies through which they can develop best-in-world capabilities;
- leverage their internal innovation capabilities through effective personal, IT, and motivational links to outside knowledge sources;
- eliminate the inflexibilities of fixed overheads, bureaucracy, and physical plant by conscientiously tapping the more "nimble" resources of both their customer chain downstream and their technology and supply chain upstream;
- expand their own knowledge and physical investment capabilities by several orders of magnitude through exploiting the facilities and program investments of outside sources.

Intellectual capital and social capital

How do companies effectively tap into knowledge sources from outsourcing vendors? Willcocks et al. (2004) argue that outsourcers should have knowledge management strategies which enable the creation and exploitation of *intellectual capital.* Creating intellectual capital is more complicated than simply hiring bright people or buying knowledge management software (Stewart, 2001).

Stewart (2001) suggests that there are three essential elements or assets which contribute to the development of intellectual capital: *structural capital, human capital,* and *customer capital.*

- Structural capital refers to the codified bodies of semi-permanent knowledge that can be transferred and the tools that augment the body of knowledge by bringing relevant data or expertise to people.

- Human capital represents the capabilities of the individuals required to provide solutions to customers.
- Customer capital is linked to shared knowledge, or the value of an organization's relationships with the people with whom it does business.

It should be noted that the mere possession of these assets is not enough. Intellectual capital can only be generated through the interplay between these essential elements. Therefore, as suggested by Willcocks et al. (2004), there should be a fourth kind of capital – *social capital* – which helps to bring these elements together and encourages interplay among them. Examples of social capital include trust, loyalty, and reciprocity within a community; namely, the values created from one's social network. There is a reciprocal relationship between social capital and intellectual capital: the former facilitates the development of the latter, which in turn strengthens social capital.

There are three dimensions to social capital: *structural, cognitive,* and *relational*. Since social capital to a great extent involves social connections, mutual respect, shared identity and culture, trust, and common motivation, it is obvious that organizations are in a better position to generate these qualities than markets. However, outsourcing often in effect disrupts and reduces social capital by dis-embedding people, systems, and institutional knowledge from the client organization. Therefore, attention should be paid in particular to cultivating social capital.

Rottman (2008) conducted a case study with a US manufacturer and its offshore outsourcing partner in India. Using the three dimensions of social capital, he derived seven practices from the case study which facilitate effective knowledge transfer. These practices are summed up in Table 5.1. It is

Table 5.1 Social capital dimensions and related practice

Social capital dimensions	Related practices
Structural (Network ties and configuration)	1. Utilize multiple suppliers to enhance network ties and to increase social networks. 2. Increase network utilization and frequency and maintain multiple connections by breaking projects into small segments. 3. Ensure knowledge retention and transfer by requiring the Suppliers to have shadows for key supplier roles.
Cognitive (Shared goals and culture)	4. Strengthen cultural understanding by visiting the offshore supplier and project teams. 5. Clarify goals by communicating the offshore strategy to all parties. 6. Integrate the supplier's employees into the development team. 7. Co-train internal employees and supplier employees to communicate goals and increase cultural awareness.
Relational (Trust)	8. Increase internal trust by understanding and managing the talent pipeline.

Source: Rottman, 2008

shown from the case study that managing the relationship at the structural, cognitive, and relational dimensions allowed the partners in the strategy alliance to increase network stability, reduce cultural barriers, share and understand common goals, and strengthen network ties.

Management control to capture intellectual capital

To leverage benefits from knowledge and expertise, Quinn (1999) suggests that companies should carefully set up certain management controls, such as the following:

- Ensuring goal and value congruence.
- Building a professional and highly trained procurement and contract management group.
- Developing a greatly enhanced strategic and operations information system at both the strategic and operations level.
- Including all insourcing transaction costs and actively measuring the benefits intended from the outsourcing relationship.
- Developing feedback systems to leverage and share knowledge and innovation in both directions.
- Creating a mutual three-level contact system between top managers, middle-level managers, and operating-level personnel. Such a contact system allows personal relationships and knowledge exchanges to take place and helps to solve problems before they occur or fester.

Willcocks et al. (2004) suggest that *enterprise partnership*, which often involves risk-reward and joint ownership arrangements, offers a promising way to leverage cost and quality gains as well as knowledge creation and exploitation. They present the example of Lloyds of London outsourcing their back-office policy and claims settlement systems to the supplier Xchanging. This example illustrates how intellectual capital is generated and retained through the formation and continuous maintenance of the partnership. Three key innovations are introduced:

1. *An enterprise partnership business model:* This entails setting up multiple joint governance bodies, which engage both client and vendor in a continuous process of planning and decision making, thereby establishing trust and mutual obligation and reinforcing the institutional relationship. Relating this model to the notion of intellectual capital, we

can see elements of customer capital and the structural dimension of social capital being leveraged.

2. *An Xcellence competency model:* The Xcellence model helps building up a community of practice to facilitate the sharing of tacit knowledge and its conversion to explicit knowledge in the form of detailed competency manuals. Thee model exemplifies the involvement of human capital and structural capital and helps to establish cognitive dimension of social capital.
3. *A four-phased implementation model:* Preparation, realignment, streamlining, and continuous improvement. This process not only helps employees make the transition from client to vendor organization, but also creates a new culture of a dynamic, profitable business. Group identity and trust are built up in this process, as well as a sense of mutual obligation. This model represents the relational dimension of social capital.

Knowledge transfer between "onsite" and "offshore" teams

To leverage the value of knowledge and expertise of both sides in an offshore partnership, a crucial element is to ensure effective knowledge transfer between "onsite" and "offshore" teams. Knowledge that is not transferred gets lost. Despite advances in ICT, breakdowns in the transfer of knowledge across distributed sites still constitute a major challenge. Oshri and associates (2008) identify the following factors which contribute to the difficulty of transferring knowledge between remote sites, especially across country boundaries:

- The diversity of local contexts, which exacerbates the "stickiness" of information, a notion developed by von Hippel (1994), which refers to tacit knowledge rooted in action, commitment, and involvement in a specific context.
- Different local routines for working, training, and learning which obstruct the development of shared understanding of practices and knowledge.
- Differences in skills, expertise, technical infrastructure, development tools, and methodologies.
- Changes in membership.
- The lack of prior experience of working together between the distributed teams.

Organizational learning processes in offshore sourcing

One way to achieve successful knowledge transfer from the onshore organization to the offshore one is through effective organizational learning processes. Huber (1991) suggests four key constructs and processes in organizational learning: *knowledge acquisition*, *information distribution*, *information interpretation*, and *organizational memory*. Knowledge acquisition refers to the process by which knowledge is obtained, and it can be further broken down into the following sub-processes:

- Congenial learning – the organization's inherited knowledge from its creators.
- Experiential learning – acquiring knowledge through direct experience.
- Vicarious learning – observation and copying of successful routines from other organizations.
- Grafting – hiring new members with new knowledge from other organizations.
- Searching and noticing – acquiring information through scanning, focused search, performance monitoring, awareness of the external environment, and internal conditions of performance.

Chua and Pan (2008) conducted a case study of a global IS department in a multinational bank which was transferring its business application support and development experience to an offshore location. They examined how different types of knowledge were transferred and identified the following types of knowledge (Iivari et al., 2004): technical knowledge, application domain knowledge, IS application knowledge, organizational knowledge, and IS development process knowledge. It is shown in the case study that, depending on the type of knowledge required, different learning sub-processes are needed, as shown in Table 5.2. While some areas of the IS knowledge can be easily grafted some require intense, vicarious, and experiential learning using rich data. Certain types of knowledge, which are more "sticky" and difficult to codify, are difficult to transfer.

A transactive memory system between onsite and offshore teams and its role in knowledge transfer

So what can we do about "sticky" knowledge that is embodied in experts in the area of knowledge and is thus difficult to transfer between distributed teams? While co-located teams may develop various memory

Table 5.2 Organizational learning sub-processes in different IS knowledge areas

IS knowledge areas	Learning sub-processes
Technical knowledge	Grafting of staff with as much of these two knowledge areas as possible will form the basis to which new knowledge will be added.
Application domain knowledge	
IS application knowledge	Experiential learning and vicarious learning were carried out through presentations, support simulations, on-the job training and playback. Self-appraisal techniques such as quizzes, individual and team appraisals, were used to check if learning was effective.
Organizational knowledge	
IS development process knowledge	A separate training programme for "analysis design", using the same knowledge transfer mechanisms as above, was created for the more experienced members of the offshore team. Onshore staff have to be retained to enable continued offshore learning.

Source: Chua & Pan, 2008

systems that support knowledge transfer, globally distributed teams face various barriers in developing such memory systems that may facilitate the transfer of contextual and embedded knowledge. A Transactive Memory System (TMS) has been defined as the combination of individual memory systems and communications (also referred to as "transactions") between individuals. The TMS concept developed by Wegner (1987) has been extensively used to examine knowledge transfer between individuals. A group level TMS consists of individuals using each other as a memory source. Three processes are involved in transactions between individuals: *encoding*, *storing,* and *retrieving.* Individuals encode information for storing and retrieving in a similar way that a librarian enters details of a new book in a particular library system before putting it on the shelves. The TMS processes of encoding, storing and retrieval also have been explained through *directory updating*, *information allocation*, and *retrieval coordination* (successively). *Directory updating* is associated with learning who knows what. *Information allocation* is about allocating information to the relevant experts for processing and storage. *Retrieval coordination* referrers to retrieving uniquely stored information for task performance purposes.

Directories which point to where knowledge and expertise reside are an important element in the TMS. Oshri et al. (2008) differentiate two types of directories: codified (e.g. information systems and technologies) and personalized (e.g. personal memory or other people's memories). Table 5.3 details encoding, storing, and retrieving processes in the context of codified and personalized directories in globally distributed teams.

Table 5.3 Transactive memory processes, codified and personalized directories in globally distributed teams

Memory process in a TMS	Types of directories in a TMS	
	Codified directories	**Personalized directories**
Encoding Having a shared 'cataloguing' system.	Creating a shared system to categorize information. This can be effectively achieved by developing a set of rules of how to label the subject and location of the expertise.	Creating a shared understanding of context and work-related processes, terminology and language.
Storing The way in which the information is organized in physical locations and in the memories of dispersed team members.	Storing information about the subject and location of the knowledge. This can be achieved by creating pointers to the location of knowledge in an expertise directory. Storing capabilities include up-to-date records of available documents and expertise.	Storing information about 'who knows what' and 'who is doing what' in individuals' memories.
Retrieving (1) Knowing where and in what form information is stored in the dispersed team. (2) Being able to find required information through determining the location of information, and, sometimes, 'the combination or interplay of items coming from multiple locations'.	Developing capabilities to find information necessary to coordinate expertise. Includes search capabilities (e.g. keyword-based) for effective and efficient search and retrieval processes.	Developing interpersonal channels through which individuals can search for information about who has expertise and in which areas, and where this expertise resides.

Source: Oshri et al., 2008

Oshri and associates (2008) suggest that in order to overcome differences derived from the local contexts of the onsite and offshore teams (e.g. different work routines, methodologies and skills), organizations should invest in development of a TMS. In particular, they recommend specific mechanisms supporting the development of codified and personalized TMS directories that help not only to develop a TMS between onsite and offshore teams but also to keep it updated over time. These include the standardization of templates and methodologies across the remote sites as well as frequent teleconferencing sessions and occasional short visits (see Table 5.4). These mechanisms contributed to the development of the notion of "who knows what" across onsite and offshore teams despite the challenges associated with globally distributed teams, and supported the transfer of knowledge between onsite and offshore teams.

Table 5.4 Organizational mechanisms and processes supporting the development of a TMS in globally distributed teams

	Codified directories	**Personalized directories**
Updating directories/encoding	• Standard document templates (for product deliverables and process phases) • 'Glossary of terms' to include unique (e.g. product-specific) terminology	• Rotation of onsite and offshore team members • Joint training programs • Team building exercises • Social activities
Allocating information/storing	• Central project repository • Standardization of tools and methods across locations • Centralization of tools on the central server, Web access	• Expertise-based division of work • Creating complementary documentation for software components (includes the name of the developer)
Retrieval coordination	• Standard process procedures (to include pointers to the location of information • Keywords-based search capabilities • Tools that enable automated notification of changes and requests (e.g. Software Configuration Management and Change Management tools)	• Systematic and frequent communications using email, tele-and video-conferencing • Technologies that enable reachability when on the move and out of working hours (e.g. mobile phones, pagers, PDAs)

From a practical viewpoint, we argue that in order to enable the transfer of knowledge between remote sites, organizations should consider the mechanisms reported above that support the development, management and coordination of collective expertise, and enable the transfer of knowledge between onsite and offshore teams. In doing so, managers should consider two key aspects with respect to work division. First, they should attempt to select project members based on their shared histories of collaboration in their respective area of expertise. In doing so, remote counterparts who know each other, have already developed a meta-knowledge relating to their counterparts and have established procedures for engagement. Such a staffing approach is likely to speed up the development of the TMS, as procedures, codified routines and social ties have already been established. Second, an expertise-based division of work should be considered when members of the team have worked with each other before and have developed shared histories. Teams that do not have shared histories, however, may benefit from a division of work that is based on geographical location for a period of time, which enables this team to establish procedures, standards and templates from the development of its codified directories, before changing to an expertise-based division of work approach.

Managing expertise within and between projects

While knowledge transfer is an important step in offshore outsourcing, the question remaining for the client executives is where they should draw the line on outsourcing their knowledge and expertise. How can the selected provider develop the knowledge and expertise of their domain, systems, and practices, to not only maintain continuity of service but also achieve the much-wanted innovation and transformation? Meanwhile, IT outsourcing provider executives have to ask themselves how they can quickly develop expertise in new areas, particularly where their teams are remote and dispersed; and how they can retain knowledge when people equipped with key knowledge and expertise move on?

Coordination mechanisms to facilitate knowledge processes in global teams

In offshore outsourcing, some providers adopt a multisite mode of work, often referred to as a Global Delivery Model (GDM) which consists of various types of arrangements that involve an onsite component at the client site and one or several remote component(s) somewhere else, typically in the provider home country and/or other locations (offshore, nearshore or onshore) where the provider has development or customer support facilities. The idea behind the GDM is to complete the work where it can be done best, makes the most economic sense, with the least amount of acceptable risk. Large suppliers (e.g. IBM, Accenture, TCS, Infosys) set up global delivery centers in locations where they have cost, flexibility and time-to-market advantages and access to large pools of talent and specialized expertise. For the very same reasons many client companies, in particular large multinationals, set up captive facilities around the world.

The multisite or GDM mode of work requires a significant amount of coordination. Otherwise, organizational performance may encounter problems like asymmetries, knowledge being "stuck" at a particular site, and lost opportunities in knowledge creation. Coordination mechanisms become knowledge management instruments. They contribute to the coherence of knowledge processes (Kotlarsky, van Fenema and Willcocks, 2008).[1]

Kotlarsky and associates (2008) have developed a model of how each category of coordination mechanism impacts on knowledge processes and thus

[1] Knowledge processes in globally distributed teams are discussed in detail in the book by Kotlarsky, J., Oshri, I. van Fenema, P.C. (2008), *Knowledge Processes in Globally Distributed Contexts*. Palgrave, London.

ultimately on coordinated outcomes. There are four types of coordination mechanisms: *organization design mechanisms*, *work-based mechanisms*, *technology-based mechanisms*, and *social (interpersonal) mechanisms*:

- Organization design mechanisms encompass formal structures such as hierarchies, linking pins, teams, and direct contacts. They *facilitate knowledge flows* by providing a structure through which knowledge workers can channel their expertise. Organization design clarifies who is supposed to know what and who is supposed to communicate with whom. It therefore economizes knowledge flows.
- Work-based mechanisms involve the specific structuring of tasks to be accomplished. They include plans, specifications, standards, categorization systems, and representations of work-in-progress, such as prototypes and design documents. Work-based mechanisms that capture knowledge are important for *making knowledge explicit*, as they enable activity replication and commonality. The use of such mechanisms implies that knowledge and expectations are made explicit and thus are known and useful to other people working at different sites or times. In such dispersed organizations, knowledge must be rapidly disseminated by means of technology.
- Technology-based mechanisms *amplify knowledge management processes* by enabling information capturing, processing, storage, and exchange (e.g. electronic calendaring and scheduling, groupware, shared databases). These technologies not only process data and information, but also trigger new ideas and enable coordinated actions.
- Social (inter-personal) mechanisms involve communication activities, working relationships, and social cognition. They help to *establish social capital* and facilitate development of a TMS (knowledge about who knows and does what). Individuals are thus knowledge workers who negotiate points of view and transform their understanding to generate innovative outputs; they have relational needs that are relevant for coordinating their work.

Practices for managing dispersed expertise

Oshri, Kotlarsky and Willcocks (2007a) point out that firms engaged in offshore outsourcing face a *relationship challenge* and an *organizational challenge*. The former refers to the client-provider relationship, namely, how a client's knowledge can be captured and retained at both onsite and remote locations to ensure uninterrupted service to the client and to further

develop services for the client. This is the knowledge transfer challenge we discussed above. The organizational challenge concerns the provider's ability to manage expertise within its own organization. In other words, the challenge is to capture expertise from an onsite team and refine and reuse it within other distributed teams. Based on their case study at TCS and its globally distributed service delivery centers, Oshri and associates (2007a) observed that the following practices are employed by TCS to address these challenges.

1. *Implement an organizational structure that is a mirror image of the client's structure:* TCS uses an organizational structure that ensures that client personnel and offshore TCS personnel can easily identify their counterpart. Oshri and associates suggest that there are three types of organizational structures found in offshore outsourcing arrangements: the *funnel* (a single point of contact and control between client and provider), the *network* (multiple points of contacts and control, and the *mirror.* Among the three, the *mirror* is found to be the most effective in terms of organizing knowledge assimilation and transfer.
2. *Implement a knowledge transfer methodology:* Codifying knowledge is the key practice here. TCS's onsite team provides documentation based on standard templates and passes these templates on to the offshore team. But this is only the first step. The offshore team then has to "play back" what they learned from the documentation by giving presentations to the onsite team. Again, while codified knowledge is useful, what is more difficult involves the transferring of tacit knowledge, which can only be obtained through learning by doing.
3. *Implement a knowledge retention methodology:* To avoid loss of knowledge due to personnel turnover, TCS has adopted a succession plan. TCS managers identify individuals who can replace them in case they leave the project or company. These potential successors are trained and back up the manager's knowledge in their expertise area. This greatly reduces the disruption and delay resulting from turnover of key players in outsourcing projects.
4. *Monitor expertise development and retention at project and organizational levels:* To enable local teams to take advantage of centralized resources, TCS has set up Centers of Excellence (CoEs) to link project and organizational levels of expertise monitoring. The CoEs are networks of experts who have advanced know-how and experience in a particular market or technological domain. They are responsible for acquiring know-how from internal and external sources and then

sharing that know-how with project teams. So CoEs serve as repositories of knowledge as well as directories which point to an expert's location.

5. *Make expertise development a key organizational value:* In TCS, every project is supported by the CoEs, by Quality Assurance, Digitization, and Codification groups. These groups provide support for the continuous development of know-how and skills. Moreover, employees receive various types of training during different phases of their career, especially in terms of where to access knowledge and expertise across team boundaries.
6. *Provide mechanisms to search for expertise at project and organizational levels:* At the project level, the onsite and remote teams keep a regularly updated expertise directory which basically answers the question *who knows what* and *who does what*. A project portal (or knowledge base) has also been built, which includes information about experts in the project, system, and project documents. Using TCS's knowledge transfer and knowledge retention methodologies, the pointers are created and constantly updated during the transition and steady state phases of each outsourcing project, as onsite and remote counterparts interact with each other to transfer knowledge and develop their expertise.[2] At the company level, a broad memory system brings external expertise into a project in a timely manner. Members of CoEs in a project also serve as connection points with experts in other projects or CoEs. Finally, TCS also organize knowledge exchange events and seminars at different locations to facilitate communication and learning between remote counterparts.
7. *Implement a reuse methodology at the global level.* TCS adopts a *component-based methodology:* This involves developing software components and building software systems by integrating components. Components are supposed to be self-contained and can be removed or replaced without affecting other parts of the system. They can therefore also be modified and/or reused. TCS makes their reusable components available on their intranet. Also made available with the components is expertise in that particular technology. It should be noted that fundamental to a reuse methodology is systematic and accurate collection of components from projects. Such practices should be cultivated and routinized so that it becomes part of the organizational culture.

[2] This is an example of development and update of a TMS system discussed earlier in this chapter.

8. *Continually measure the contribution of reusable assets:* To reap the benefit of reusable components, firms also have to reach a certain maturity level in terms of systems development standards; for example, design, testing, and documentation. On top of this, TCS's quality assurance group also regularly tracks how often and how well components are reused. They also optimize the process of reusing components by centralizing the process and by carefully managing the pool of reusable solutions.

Summary

In this chapter we reviewed the challenges that both vendors and clients face in terms of managing knowledge and expertise. We opened this chapter with a simple question: what happens to knowledge when you outsource? This chapter illustrated how knowledge can be effectively utilized by both vendors and clients and how the management of knowledge and expertise can be perceived as a value adding activity which can benefit vendors and clients alike. However, most clients have not fully captured the potential of advancing learning from such opportunities and in most cases have trusted the management of knowledge and expertise with their vendor.

Relevant teaching case

Oshri, I., Kotlarsky, J., and Willcocks, L. (2007), "Managing dispersed expertise in IT offshore outsourcing: Lessons from Tata Consultancy Services," *MIS Quarterly Executive,* 6 (2): 53–65.[3]

[3] This is not a classical teaching case; however, the paper describes in detail aspects relating to knowledge and expertise in an offshore outsourcing setting.

CHAPTER 6

The client perspective: Vendor selection strategy, retained management capabilities, and legal issues

Introduction

One key factor in achieving success in global sourcing arrangements is the quality of the client-supplier relationship. Similar to marriage between two people, a sourcing strategy should be geared toward selecting the most suitable partner. Selecting the right vendor is critical to maximizing the benefits and minimizing the risks associated with the venture. In this chapter we will review the major considerations during the vendor selection process, such as:

- the key criteria for evaluating vendors;
- the number of vendors involved in one sourcing contract;
- which capabilities are needed to be developed and retained;
- the critical legal issues involved in outsourcing and offshoring;
- the role of the contract in managing risk.

Vendor selection: Key aspects and considerations

There are two key aspects involved in a client's decision to outsource: the configuration of the deal and the market in which the client would like to operate. With regard to the configuration, a client should consider the configuration that would best facilitate the objectives of the firm in this particular sourcing arrangement. Different configuration options (discussed in Chapter 4) include the *sole supplier* (i.e. single supplier providing the entire service), *best-of-breed* (i.e. the client organization plays the

role of the head contractor to manage a supplier network), *panel* (i.e. list of preferred suppliers which work in competition), and the *prime contractor* model (i.e. a supplier network that operates under the control of the head contractor). A firm should examine thoroughly its business needs in comparison to the benefits and risks associated with each configuration model. These are summarized in Table 6.1.

Multisourcing, which implies combining IT and business services from a set of internal and external providers to achieve optimal outcome, appears to be the long-term dominant trend in global sourcing. The best of breed and panel approaches discussed earlier are examples of multisourcing. Levina and Su (2008) outlined the benefits and risks associated with the multisourcing strategy. Benefits of multisourcing include the increased competition among suppliers in terms of price, quality and degree of innovation, the reduction of operational risk and dependency (each supplier becomes less critical), and the reduction of strategic risk (sensitive information is split between different suppliers). On the other hand, risks of multisourcing include the reduction of incentives to make customer-specific or supplier-specific investments. Along these lines, the two parties are less willing to make investments in relationship building, technology, dedicated staff, or physical assets as the basis for enhancing their collaboration.

With regard to the markets in which the client may wish to operate, the client has three main choices to consider suppliers operating in various settings. These settings are *domestic* versus *offshore*, *local* versus *global*, and *niche* versus *broad*. More specifically:

1. *Domestic* versus *offshore:* When going offshore, most firms tend to use a best of breed approach. However, there are some organizations that choose to establish a prime contractor to manage the offshore vendors. Typical services for which the offshore market has been shown to generate increased cost savings include applications coding, call-center operations, data entry, and transaction processing. Consequently, the offshore market has tended to be rather niche-oriented. However, as the larger offshoring suppliers are expanding the scope of their services as well as the geographic areas they cover, this trend appears to be changing. In doing so, they have of course to compete against existing global suppliers. On this issue, In fact, Indian service providers such as Infosys, Wipro, and TCS are gaining ground against established global suppliers such as IBM, Accenture, and Hewlett-Packard.

   An interesting trend that appears to be emerging in this context is "bestshoring"; in other words, mixing offshore, nearshore, and onshore

Table 6.1 Supplier configuration options and associated benefits and risks

Option	Benefits	Risks	Management Issues
Sole supplier	Sole accountability Potential for the supplier to create economies of scale, the benefits of which may be passed on to the customer Streamlined contracting costs and processes End-to-end key performance metrics	Monopolistic supplier behaviours Compromise quality where the supplier is not best of breed in services, industries or geographic locations	Extensive contract flexibility rights due to dependence on the supplier Independent expertise to avoid solution channelling and ensure value for money
Prime contractor	Single point of accountability Allows best-of-breed subcontracting Streamlined, but a little more complex, contracting costs and processes End-to-end KPIs	Prime contractor should be expert at subcontracting (selection, management, disengagement) Client may desire different subcontractors Client is often required to resolve issues between the prime and subcontractors Primes and subcontractors often encroach on each other's "territories"	Contract ensuring various rights over the subcontracting (access, selection, veto etc) Compliance auditing ensuring the prime contractor passes obligations to the subcontractors Oversight ensuring all parties are operating as an efficient and unified front
Best of breed	Greater control Flexibility to change vendors Promotes competition and prevents complacency	Attracting the market for small "slices" of work Keeping suppliers interested, giving management focus and allocating staff Interdependent services and contracts Integration complexity Tracing accountability	Designing interdependent contracts between independent suppliers Multi-party interface and handover management End-to-end process management is more difficult Multiple life cycle management
Panel	Buy services and assets when required Promotes ongoing competition Prevents complacency	Attracting the market when panel is a pre-qualification and does not guarantee work Adding new panel members or wanting to use suppliers not on the panel	Panel bidding process for work Ongoing ranking of panel members based on performance Managing and evaluating the total program.

Source: Willcocks et al., 2006

in the same deal (discussed briefly in Chapter 3). In this way the supplier locates its resources where they are best deployed according to the notion of fair quality for a fair price.

2. *Local* versus *global:* In a majority of the cases where an organization follows the sole supplier configuration, global providers are utilized because of their worldwide reach and the broad scope of services they offer. Such large suppliers have access to more resources and economies of scale and can deal with fluctuations in the demand for services.
3. *Niche* versus *broad:* As niche suppliers offer a limited range of services, they are usually deployed in a best of breed configuration and are contracted either directly with the customer or indirectly through the prime contractor. The respective advantages of these two types of suppliers are illustrated in Table 6.2.

Some client firms struggle with the supplier selection process. In particular, client firms seek a framework that could guide them in making this decision. The Willcocks et al. (2006) key supplier capabilities model

Table 6.2 Niche versus broad

Supplier capability	Niche supplier	Broad supplier
Leadership	Supplier leaders will be well known and there will be easy access to the CEO and straightforward deployment of resources	Harder to contact top management
Planning and contracting	Suppliers have more vested interest in the relationship because they cannot absorb or afford failures	The client should push hard for creative contracts, as suppliers have greater ability to absorb risk than niche players
Organizational design	Less formal design is required and the deal is based more on personal relationships	Formal organizational design is more important
Process improvement	Niche suppliers may rely less on processes (like Six Sigma, CMM), but make up for this with domain expertise	Broad suppliers may rigidly use CMM
Domain expertise	There will be better domain knowledge because of specialisation, but specific elements of business knowledge will still need to be transferred to the supplier	Clients need to pay special attention to knowledge transfer. Large suppliers can gain domain knowledge through the transfer of relevant employees

Source: Willcocks et al, 2006

(discussed in Chapter 4) is one framework that can help client firms to make an informed decision with regard to the selection of a global or a local supplier. In this particular study, the customer – a large US retailer – had an eight-year outsourcing relationship with a domestic vendor. The issue was whether to award a large project to the existing domestic supplier or to an Indian one. The Indian supplier had a major cost advantage in comparison to the domestic supplier and had performed well in some pilot projects. However, the customer underestimated the amount of effort needed to manage remote teams and the volume of re-work needed because the Indian supplier could not understand the company's business. These problems eroded much of the cost savings.

As is illustrated in Table 6.3, the domestic supplier had superior capabilities to deliver the project compared to the offshore supplier. On the other hand, the Indian supplier had cost advantages. The retailer decided to use the offshore supplier bid to pressurize the domestic supplier to reduce its price by 10%–50%. However, by forcing the domestic supplier to reduce their costs the retailer weakened the business management capability of the domestic supplier; in other words, its ability to earn a profit while delivering the service. On this issue, Willcocks and associates (2006) emphasize that a number of domestic suppliers are increasingly creating offshore captive centers to compete with Indian suppliers on costs, while leveraging their domestic presence to keep customer service levels high.

It is important to stress that suppliers do not need to demonstrate high levels of performance in all 12 capabilities (i.e. leadership, business management, domain expertise, behavior management, and so on) and all three competencies (i.e. relationship, delivery, and transformation). For example, not every supplier will need to form a close partnership with a client. For this reason, the client should not be particularly concerned with the relationship competency of the supplier. On the other hand, the client should pay careful attention to the levels of relationship competency demonstrated by those suppliers with whom they wish to maintain a close long-term partnership, for example where they need the supplier's ability to support future changes in the client's business direction, or need innovation from the supplier. A contrasting example is where a client contracts with a supplier only to maintain legacy systems. In such a case, the client is likely to focus on the capabilities related to delivery competency (namely domain expertise, business management, behavior management, sourcing, program management, leadership, and governance capabilities) and less on other capabilities.

Clearly not every client will need a supplier to help transform its business processes and technology. However, if the objective of outsourcing is

Table 6.3 The relative capabilities of two suppliers

Supplier capability	Domestic supplier	Offshore supplier
Leadership	*Strong* The supplier had named a well-respected manager with a good support team.	*Good* The supplier had named a well-respected manager but is less clear on who will serve in the supporting team.
Business management	*Strong* Given the high cost bid, the supplier should have been able to deliver the project and still earn a profit.	*Strong* Although the bid was low, the supplier cost base was low and should have been able to deliver and still earn a profit.
Domain expertise	N/A	N/A
Behaviour management	*Strong* Supplier employees would ask the customer if they needed clarification. Many of the supplier staff will have worked with the client before.	*Weak* Supplier employees were eager to please but did not share bad news promptly. The supplier staff were mostly new to the client.
Sourcing	*Weak* It was likely that the supplier would assign low level programmers.	*Weak* It was likely that the supplier would primarily use new hires from Indian universities.
Process improvement	N/A	N/A
Technology exploitation	*Strong* The supplier had performed this work in the past and had automated tools.	*Strong* The supplier had performed this work in the past and had automated tools.
Programme management	*Strong* The supplier had demonstrated this capability in the past	*Weak* The supplier relied heavily on an on-site engagement manager who was expected to fulfil too many roles.
Customer development	N/A	N/A
Planning and contracting	*Weak* The supplier was very expensive.	*Strong* The supplier's bid was 60% lower than the domestic supplier.
Organizational design	*Strong* Supplier staff were primarily on-site.	*Weak* The supplier staff would be offshore, with an onsite engagement manager as the contact.
Governance	*Strong* The supplier already had reporting processes in place and reported twice a week.	*Weak* Although the supplier was CMM5, internal supplier reports were not shared, and in the past the client had had to request daily reporting.

Source: Willcocks et al, 2006

transformation, for example off the BP HR function in a contract signed with Exult in 1999, then the supplier will need requisite capabilities including in re-engineering and technology exploitation (see Chapter 4). Along these lines, a firm should identify and focus on the capabilities and competencies that are more relevant to its business when selecting a vendor.

In addition to the supplier's capabilities and competencies, a client should also consider the extent to which the supplier would be willing to "go the extra mile." By this we mean that the supplier will perceive the relationship as based on a "win-win" approach and will thus exert extra effort for its success. In other words, the willingness of suppliers to deliver capabilities and competencies depends also on their desirability to work with a particular customer.

With regard to the criteria affecting supplier selection, the results of the survey of the Outsourcing Institute (2003) are particularly interesting (Figure 6.1).

Cost was cited by 62% of companies as a very important factor affecting the choice of the outsourcing supplier. Only half of the respondents were concerned about their supplier's commitment to quality, 40% were interested in the flexibility of the contract, and only 33% paid attention to the reputation of the vendor.

However, it is not only the client who is choosing a supplier. Suppliers also assess the attractiveness of a client before deciding whether to engage in an outsourcing relationship. There are several factors that can make a client more attractive than others for a supplier. These include the prestige of the customer, the degree to which the client CEO is involved in the venture, the size of the project, the potential for additional supplier revenues, the opportunity to enter new markets or business, or the opportunity to acquire new knowledge. Furthermore, the supplier's desire to obtain

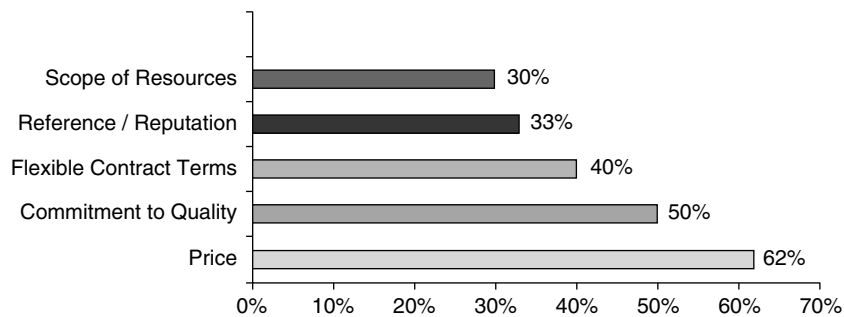


Figure 6.1 Factors affecting the choice of the outsourcing partner

Source: Adapted from Outsourcing Institute, 2003

business from a particular customer may depend on the sales targets of the supplier's headquarters. By this, we mean that a supplier may take business from a client even when the terms and conditions of this contract are not in the supplier's favor, but are mainly to meet its sales figures. On the other hand, in the case where the vendor is satisfied with its current revenue stream, it is likely that the supplier will be very cautious in attracting business when the terms of the contract are not in its favor.

Client sourcing capabilities: The retained organization

In Chapter 4, we examined the supplier capabilities that client firms should carefully assess when deciding on their sourcing strategy. In this section, we are going to focus on the capabilities that a client firm should retain to ensure that it can exploit the business advantages of IT over time. Willcocks and Craig (2008) have identified nine such capabilities:

1. *Leadership:* This capability is related to the challenge of integrating IT efforts with business goals and practices. A major activity for leadership is to devise organizational arrangements in terms of governance, structures, processes, and staffing with the aim of managing their interdependencies in a way that does not constrain or inhibit the value delivered by the IT function. Leaders can also influence perceptions with regard to the role of IT and its contribution to organizational processes and practices. Furthermore, they can establish strong business/IT relationships at the executive level and exploit them for the creation of a shared IT vision.
2. *Business systems thinking:* This capability is related to the challenge of envisioning the business process in terms of its functions, efficacy, and utility as a result of technology. A business systems thinker is capable of building and communicating holistic views of current organizational activities as a basis to identify new patterns that will generate the optimal integration of strategy, process, technology, systems, and people.
3. *Relationship building:* This capability is related to the challenge of getting the business engaged in IT issues in a constructive way. It is important to note that while the business systems thinker is concerned with the integrated business/IT thinking, relationship building is concerned with the wider communication between business and IT communities. More specifically, relationship building involves helping users understand the

potential of IT for the creation of value, helping users and IT experts collaborate, and ensuring users' ownership and satisfaction. For most organizations this is a major challenge resulting from the difference in culture between "techies" and "users." Role holders with this capability have to facilitate a shared purpose and constructive communication among people engaged in the business and the IT function.

4. *Architectural planning and design:* This capability is related to the challenge of creating a coherent design of a technical platform that will be able to support current and future business needs. People holding this role are involved in shaping the IT architecture and infrastructure by envisioning the type of technical platform that will best serve the firm's business and by formulating policies and processes that will ensure integration, flexibility, and efficiency in IT services. The principal challenge for the architect planner is to ensure that the organization is up-to-date with technology trends and is consistently able to operate from an efficient IT platform.
5. *Making technology work:* This capability is associated with the challenge of achieving rapid technical progress. The capability of making technology work lies in the overlap between the challenges of IT architecture design and the delivery of IT services. The role of technology "fixers" is to manage problems associated with IT and figure out how to address business needs that cannot be sufficiently facilitated by standard technical approaches. Even organizations that are engaged in total outsourcing acknowledge the need to retain this sort of capability.
6. *Informed buying:* This capability is related to the challenge of managing the IT outsourcing strategy in a way that meets the interests, priorities, and goals of the business. People involved in this role are concerned with different tasks, including: analysis and benchmarking of the external market for IT providers; the design of a five to ten year sourcing strategy; tender leadership, contracting, and management processes of the sourcing venture.
7. *Contract facilitation:* This capability is associated with the necessity to manage and govern the relationship between suppliers and business users. Along these lines, the contract facilitator aims to ensure the success of existing contracts for IT services and to provide a major point of reference through which problems and conflicts are resolved promptly and efficiently. From our experience the need for this role has rarely been identified in the beginning of the outsourcing relationship. It tends to emerge as a response to ongoing issues such as users requesting more services or changes, the need to coordinate multiple suppliers, as well as the need to monitor service delivery.

8. *Contract monitoring:* This capability concerns the protection of the current and future contractual position of the firm. It involves the development and maintenance of a robust contract as a fundamental element in the governance of the outsourcing relationship. It is important to note that while the contract facilitator is mainly involved in the day-to-day operations, the contract monitor ensures that the business position is contractually protected at all times. The supplier is assessed against both the standards in the contract as well as against external benchmarks.
9. *Vendor development:* This capability is about ensuring value-adding activities within the outsourcing relationship. The person concerned with the growth of this capability seeks to cultivate and enhance the long-term potential of suppliers to add value to the firm's operations. One major goal in vendor development is to create a win-win situation where the client receives increased value-adding services and the supplier generates better revenues and learning opportunities. As illustrated in Chapter 1, one of the hidden risks of outsourcing is the costs involved in changing suppliers. When taking into account such a risk, it would be in the client's interest to maximize the value-adding activities from its suppliers while guarding against "mid-contract sag", where the supplier meets the delivery criteria of the contract, however only to the minimum required.

Figure 6.2 illustrates these nine capabilities, as well as the way in which their combination contributes to the delivery of the four fundamental tasks of the IT function. These include:

1. *Governance:* This task refers to the dynamic alignment of the activities of the IT function with those of the overall organization.
2. *Business and function vision:* This is a demand-driven task which is associated with defining the systems, information, and processes needed. This task is also geared toward exploiting such business components to improve business efficiency.
3. *Architecture planning and design:* This task is supply-driven and is associated with defining the architecture of the evolving technical platform and dealing with the risks related to non-routine technical issues.
4. *Delivery of service:* This task is concerned with managing the sourcing strategy. It seeks to investigate and understand the external market and involves the ability to select, engage, and manage third-party IT resources and service delivery.

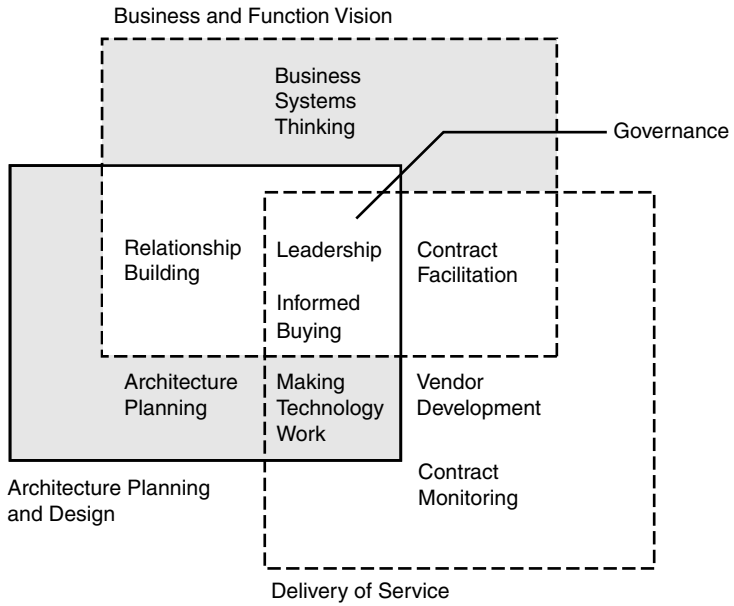


Figure 6.2 Nine core IT capabilities

Source: Willcocks & Craig, 2008, adapted from Feeny and Willcocks (1998)

Client organizations use primarily three mechanisms to identify and develop capabilities. These mechanisms include (i) certain organizational processes, (ii) the firm's culture, and (iii) the firm's structure. Table 6.4 illustrates how capabilities emerge as a result of an organization's processes, culture, and structure and presents some indicative examples.

Retaining the management of these capabilities is critical for the client simply because these capabilities will offer more control over the firm's IT operations. However, developing a high performing retained organization is not free of challenges. There are five major challenges that should be thoroughly considered in this regard:

1. *Human resource challenge:* The nine roles that have already been illustrated and associated with each of the nine retained management capabilities demand high performers. Each role requires a mix of business, technical, and interpersonal skills (these are summarized in Table 6.5). However, there appears to be much greater emphasis on business skills and business orientation in nearly all roles (excluding those of technical fixers and to some extent technical architects). Furthermore, there

Table 6.4 Organizational mechanisms for building capabilities

Mechanism	Definition	Examples
Processes	Capabilities emerge from problem-defining and problem-solving routines interwoven with individual skills. At a higher level, these are formally combined into organizational processes	– IT governance – Strategic IT planning – Contract reviews and market testing – IT investment reviews – Process models (for example ITIL) – Compliance
Culture	Capabilities emerge from links across a mosaic of organizational elements, such as incentive plans, operating systems, corporate culture, or behaviour-shaping practices, such as encouraging "mistakes"	– Career models – Reward and recognition – Job families – Competencies – Service orientation
Structure	Capabilities emerge as a key "product of the organization as an entire system". In other words capabilities are embedded in organizational processes and are bounded by the structure of the organization	– IT organizational model – Group CIO reporting line – Business-unit IS function reporting lines – Roles and responsibilities

Source: Willcocks et al., 2007

appears to be an increased need for interpersonal skills in all roles, except that of contract monitor.

2. *The supplier challenge:* In specific projects and services, suppliers will need to have complementary rather than competing or duplicating skills. Furthermore, it is important to create a climate of cooperation between the in-house management team and the supplier groups. Taking into account the multi-supplier outsourcing trend, a supplier's ability to cooperate with other vendors is of great significance for the performance of the venture.
3. *The perennial challenge – relationships:* The way the relationship between the supplier and the vendor evolve is a critical element that could affect the success of the project. For example, as has already been discussed in Chapter 4, one element that affects the way the relationship evolve is the power balance between the two partners. Maintaining good relationships throughout the outsourcing project is extremely challenging, as power is likely to shift from the client to the supplier over time. While it is expected that both clients and suppliers will exploit this power position, there should be a tipping point in which the good will and further development of the relationship is not diminished. Evidence by Willcocks and Craig (2008) shows that relationship management can create a 20%–40% difference in performance.

Table 6.5 Skills, time horizons and orientations of retained capabilities

Core it capability	Business skills	Technical skills	Interpersonal skills	Time horizons	Motivating values
IT Leadership	High	Medium	High	Future/ Present	– Strategy – Structure – Individuals
Business systems thinking	High	Medium	Medium	Future	– Strategy
Relationship building	Medium	High	High	Present	– Structure – Individuals
Architecture planning and design	Low/ Medium	High	Medium	Future	– Technology
Making technology and processes work	Low	High	Low/Medium	Present	– Technology
Informed buying	High	Medium	High	Future/ Present	– Strategy – Structure
Contract facilitation	Medium	Medium	High	Present	– Structure – Individuals
Contract monitoring	Medium	Medium	Low/Medium	Future	– Structure
Vendor development	High	Medium	Medium/High	Future	– Strategy – Individuals

Source: Willcocks & Craig, 2008, adapted from Feeny and Willcocks (1998)

4. *The project management challenge:* In dynamic business environments there is an increased need for appropriate project management skills. Project management must be an organizational core capability and not an asset of a particular division or department. In the retained management capabilities framework (see Figure 6.2) candidates for the role of the project manager are most likely to be found in the relationship builder and technical fixer roles.
5. *Rising challenges:* IT security has moved up the organizational agenda in this period, not only because of the increased security risks arising from increased offshoring but also because of the growing concern of hacking and potential terrorism. Along these lines, there is a need to retain internal capability around security. On this issue, the senior IT executive of a multinational company suggested, "Clearly we don't want to do security administration. Happy for that to be outsourced. But all the monitoring and compliance, all that sort of thing, we believe we need to keep a pretty tight control over."

Legal issues

The legal issues that arise in sourcing arrangements are numerous. Some of the most common ones are related to confidentiality, security, intellectual property, and compliance. A more thorough overview of these will be presented in this section.

Confidentiality

Both the customer and the vendor will want to protect their confidential information during their sourcing partnership. For this reason, each party should examine what information it regards as confidential and what safeguards it should implement. These issues should be carefully considered by both parties and resolved before the agreement is signed. However, in practice both clients and suppliers appear to underestimate these issues, with the consequence of running into serious problems.

It is important to note that issues with regard to the confidentiality of data are more likely to arise on termination. Often, in such situations, the client will attempt to ensure access to information required for the continuation of uninterrupted service either by the retained organization or by a subsequent supplier. Similarly, the supplier will attempt to protect its proprietary procedures and information, which can be seen as distinctive competences critical for its competitive position.

Security

The security requirements of the sourcing partners will vary significantly from one sourcing arrangement to another depending on the nature of the customer's business, the personal data being processed, and the services being sourced. For example, it may be compulsory to include a commitment to comply with specific security standards, such as BS 7799 and ISO 27001.

Below we present some examples of common security issues firms are concerned with (based on Lewis, 2006):

Data security

- Securing access to data to validated and authorized employees.
- Taking all reasonable steps to ensure that outsourcing employees cannot and do not copy data.

- Ensuring appropriate levels of authorized access with audit trails of all access being provided.
- Providing access rights standards.
- Holding data in a manner compliant with all legislation and best practice guidance.
- Having detailed written procedures for data handling.
- Keeping data separate from other companies' data.
- Ensuring that data is not corrupted by other companies' data.
- Ensuring that data is held in valid secure storage on appropriately licensed software.
- Ensuring that data is held on appropriate hardware which is both physically and technically secured.

Staff security

- Appropriate security checking of all authorized personnel.
- Only using validated contract staff to maintain physical or technical security and access.
- Periodically checking that authorized personnel are following designated procedures.
- Ensuring that new staff sign protocol and procedural documentation.

Backups and disaster recovery

- Keeping all data appropriately backed up.
- Having appropriate disaster recovery plans and recovery procedures in place.
- Periodically testing all disaster recovery plans.
- Documenting disaster recovery procedures and ensuring that valid recovery contracts are in place.

Hardware

- Ensuring that all hardware is maintained in an appropriate secure location.
- Ensuring that correct power, air conditioning, and fire prevention are available with hardware.
- Providing a validated hardware list to the customer.
- Allowing the customer to inspect and query the hardware used.
- Conforming to any legislative or procedural requirements for physical equipment maintenance.

- Ensuring that data are removed in a secure manner from redundant, broken or otherwise damaged equipment.
- Providing a log of the procedures for removing data from equipment.
- Ensuring that equipment is swept before it leaves the supplier's premises.

Security documentation

- Providing to the customer physical and technical access logs.
- Providing procedures for ensuring that no physical or technical breach of security occurs.
- Providing reports on any security breach together with remedial action taken.
- Documenting all security procedures including reporting procedures for breach of security.

Intellectual Property

Intellectual Property (IP) rights are also of major concern to both the client and the supplier. These refer to the rights that have been given to people over the creations of their minds, including literary, musical, or artistic works, inventions, symbols, names, images, and so forth. The key forms of IP are patents, copyrights, trademarks, and trade secrets. Intellectual property shares many of the characteristics of physical property, and thus it is treated like an asset that can become the object of different forms of transactions (i.e. buying, selling, licensing etc).

IP protection and enforcement mechanisms differ on a country-by-country basis. For this reason, offshoring arrangements can become particularly complicated in managing IP issues. It should also be noted that courts in different parts of the world operate under different laws and regulations and very often give conflicting judgments. In these judgments there is regularly evidence of bias that is associated with the country in which each company domiciles (i.e. courts tend to favor companies residing in their respective countries). Along these lines, companies (both from the customer's and the supplier's side) should be particularly careful, as the absence of suitable contractual safeguards can put at risk the firm's rights to its own intellectual property.

Baldia (2007) has suggested that IP concerns are particularly important in the case of KPO, and that IP ownership, IP violation, and issues related to confidentiality and privacy must be carefully addressed in every KPO

venture. According to Baldia, in any KPO venture a customer must:

1. Perform a careful legal due diligence on national and local IP regulations.
2. Examine the legal issues that arise in relation to the specific KPO arrangement.
3. Take appropriate action (i.e. measures and safeguards) that will protect the firm from losing its IP rights.

Compliance

Both the customer and the supplier will need to ensure that they operate in compliance with the wider legal framework.

For example, with regard to data protection, the sourcing partners will need to ensure that they comply with their respective obligations under the Data Protection Act (DPA, 1998) and that they follow its principles that are illustrated below (based on Lewis 2006):

1. Personal data shall be processed fairly and lawfully.
2. Personal data shall be obtained only for one or more specified and lawful purposes, and shall not be further processed in any manner incompatible with that purpose or those purposes.
3. Personal data shall be adequate, relevant, and not excessive in relation to the purpose or purposes for which it is processed.
4. Personal data shall be accurate and, where necessary, kept up to date.
5. Personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes.
6. Personal data shall be processed in accordance with the rights of data subjects under this Act.
7. Appropriate technical and organizational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data.
8. Personal data shall not be transferred to a country or territory outside the European Economic Area unless that country or territory ensures an adequate level of protection for the rights and freedoms of data subjects in relation to the processing of the personal data.

Another example of a wider regulation with significant legal implications for sourcing arrangements (more specifically outsourcing arrangements in the financial sector) is the Markets in Financial

Instruments Directive (MIFID). MIFID is a new EU directive that came into force in November 2007. The principal objective of MIFID has been to harmonize the operations of the financial sector throughout the European Community. MIFID was intended to replace the Investment Service Directive (ISD) and, unlike its predecessor, it has been explicit in addressing outsourcing governance within the financial industry. More specifically, the new directive outlined the obligations of each party in relation to the outsourcing relationship and identified detailed rules on the steps that firms need to take to comply with these rules.

On this basis, MIFID had significant governance implications both for existing and future IT outsourcing relationships. For those firms that are currently in IT outsourcing relationships, there will be a need to address the new regulatory requirements of MIFID and take appropriate action for renewal, renegotiation, or change of existing contracts. However, for those firms intending to enter into new IT outsourcing relationships, there will be an intense need to focus upon issues of governance.

A key mechanism to deal with such and other legal issues that arise in the supplier-client relationship is the contract. In essence, the contract sets a framework for the sourcing relationship by defining objectives and responsibilities, as well as the processes and procedures to be followed by the partners. However, as will be further illustrated in Chapter 8, while the contract plays a fundamental role in the management and governance of the sourcing relationship, it cannot encapsulate all the contingencies that may occur. For this reason although the role of the contract is critical in the creation of legal boundaries between the partners, the management of the venture goes to a good extent beyond the legal reach of the contract to rely on the actual relationship between the sourcing partners.

Summary

This chapter has reviewed the various aspects involved in the relationship between a vendor and a client. As our opening statement implies, it is about making this partnership work and it really does takes much more than just action. While the selection process of a partner is critical, no less important is the development of the retained organization, to ensure that the client focuses on what is critical in this outsourcing arrangement. Meanwhile, as in marriage, understanding the legal implications, in case things go wrong, remains a perennial necessity.

Relevant teaching cases

Willcocks L.P. and Reynolds, P. (2008), *"Managing IT Outsourcing and Core Capabilities for Business Change: The Commonwealth Bank of Australia Case*," available in this book.

Jaiswal, V. and Levina, N. (2008) *"JIT Full Circle Outsourcing,"* in: IT Outsourcing – Impacts, Dilemmas, Debates and Real Cases in A.L. Albertin and O.P. Sanchez (eds.), Editora FGV, Sao Palo, Brazil. Also available from the author's website: http://pages.stern.nyu.edu/~nlevina

CHAPTER 7

The IT outsourcing lifecycle and the transition phase

Introduction

Although the multi-billion dollar outsourcing industry is flourishing, a number of outsourcing arrangements have been underperforming and some have even been terminated. Poor management and governance of the outsourcing relationship have been often cited as the primary reasons for less successful outsourcing contracts. Before we investigate the management and the governance of outsourcing relationships, which will be further discussed in Chapter 8, it is important to understand the key stages of the outsourcing process, as well as the key practices that can be applied in each stage.

This chapter discusses the IT outsourcing lifecycle. In doing so, it provides a checklist of key activities that a client organization needs to fulfill to prepare and properly execute an outsourcing relationship. The chapter also elaborates on the key requirements for designing and executing the transition phase. We, therefore, focus on the following aspects:

- the key stages of the IT outsourcing lifecycle;
- the most effective practices available for clients to cope with challenges throughout the entire ITO lifecycle;
- the key requirements for executing the transition phase.

The IT outsourcing lifecycle

One of the most comprehensive models of the outsourcing lifecycle has been provided by Cullen et al. (2005). As is illustrated in Table 7.1, the model consists of four phases: *architect*, *engage*, *operate* and *regenerate*. These phases are composed of a total of nine building blocks. In the outsourcing lifecycle, each phase and its constituent building blocks pave way for the next phase. Thus, the effectiveness of each building block depends

Table 7.1 The outsourcing lifecycle model

Outsourcing phase	Building block	Goal	Key outputs
Architect phase	Investigate	Veracity, not ideology	Gather insights Test expectations Collect market intelligence Peer assessment
	Target	Appropriate services identified	Outsourcing model/mode Target services identification Profiles
	Strategize	Informed, not speculative strategies	Rollout Strategic "rules" Program Skills Communications strategy Business case rules & base case Feasibility & impact analysis
	Design	Well-designed future state	Blueprint Scorecard Draft SLA Draft price model Draft contract Relationship Retained organization Contract management function
Engage phase	Select	Best value for money	Competitive stages Evaluation team Selection strategy & criteria Bid package Bid facilitation Evaluation Due diligence
	Negotiate	Complete, efficient contract	Negotiation strategy Negotiation team Effective negotiations
Operate phase	Transition	Efficient mobilisation	Final plans Transition team Managed staff Knowledge retention & transfer Transfers Governance structures setup Engineering Acceptance
	Manage	Results	Relationship Reporting Meetings Admin & records

Continued

Table 7.1 Continued

Outsourcing phase	Building block	Goal	Key outputs
			Risk management Issues, variations & disputes Continuous improvement Evaluations
Regenerate phase	Refresh	Refreshed strategy	Next generation options Outcomes & lessons Knowledge refresh Options business case & strategy

Source: Cullen et al., 2005

on the preceding ones, with the last phase initiating the next generation outsourcing strategy and lifecycle.

During the **architect phase**, the foundations for the outsourcing venture are set out. This phase comprises the first four building blocks. The first building block is the *investigation*. The primary goal of this building block is to replace ideological beliefs with goals. The key activities performed by the company in the first building block include gathering insights via experts and experienced organizations, determining and testing goals and expectations, collecting intelligence on market conditions and potential suppliers, and investigating similar decisions and peer organizations. For example, a state government agency might investigate the sourcing decisions and strategies of two similar state government agencies, a federal agency as well as two companies from the private sector. The organization might try to gather market insights and understand the implications of different sourcing tactics for its operations. This approach would enable the organization to form as well as develop its previous thinking on its outsourcing strategy.

The second building block is *target*. The primary purpose of this building block is for organizations to identify the areas in which outsourcing can be beneficial to their operations. The key activities performed by the company in the second building block include matching goals to an appropriate outsourcing model, identifying objective criteria suitable for service providers, and defining the scope of outsourcing. For example, in the case of an international airline company, during the initial discussions concerning which activities should be outsourced, all the executives supported the argument that the part of the business that was within their control was absolutely core and thus should remain in-house. Later on, when consultants came in, the company created a set of objective criteria relating to the

long- and short-term benefits to be pursued through outsourcing, as well as relating to the barriers to outsourcing a specific activity. Based on these criteria, they identified those processes that presented the best candidates for outsourcing.

The third building block is *strategy*. The primary goal of this building block is to conduct the planning that will enable effective decision making during the rest of the lifecycle. The key activities performed by the company during the third building block include deciding the rollout approach (e.g. big bang, phased), determining key "rules" guiding the outsourcing relationship, designing the detailed lifecycle program, identifying and sourcing the lifecycle skills, preparing the lifecycle communications strategy, preparing the business case rules and the base case, and assessing the feasibility, risk, and impact of the outsourcing on the organization. A poorly prepared outsourcing strategy can result in a number of time-consuming and costly mistakes. As an example, the outsourcing team of a telecommunications company did not have a clear plan concerning employee transfer to the vendor, which delayed the handover period by three months. As a result, during this period neither the client organization nor its chosen supplier had the necessary staff to conduct normal service delivery.

The fourth building block is *design*. The primary goal of this building block is to wrap up the architect phase and define the planned configuration of the deal. The key activities performed by the company during the fourth building block include preparing the commercial and operating blueprint, developing balanced score metrics, drafting the service level agreement and the price and contract framework, designing the interparty relationship (structure, roles, authorities, etc.), the retained organization and the governance function. The lack of an appropriate design of the outsourcing relationship may result in poor performance for both vendor and client. As an example, an international airline had created a "handshake agreement" with a call-centers supplier because they had very effectively cooperated in the past. Their cooperation was considered as a "strategic partnership" and for this reason both parties believed that they only needed a high-level memorandum of understanding (MOU). Years later, the airline company found that it was being overcharged and that the overbilling resulted from the fact that there were no detailed descriptions of service delivery and pricing.

During the **engage phase**, the client would choose one or more suppliers to carry out the work. At this phase the contract is also negotiated. The fifth and the sixth building blocks are central to the activities carried out during this phase. The fifth building block is *selection*. The primary purpose of this building block is to choose the most appropriate vendor. The

key activities performed by the company during the fifth building block include planning in detail the content of the outsourced work, identifying the most appropriate evaluation team, determining the most appropriate evaluating criteria, requesting information from bidders per each bid, applying interactive evaluation techniques, selecting the supplier based on value for money, and conducting the five due diligence processes on shortlisted suppliers (i.e. company, price, solution, contract, and customer reference). Lets consider example of a bank that generated extensive call for Expression of Interest (EOI) in an open tender process. However, the company had not developed a clear evaluation approach of the bids it would receive. The company then received 14 bids and realized that it would need a structured evaluation methodology to select its supplier. After developing its methodology of evaluation, the company discovered that its EOI had elicited only 30% of the information they needed to choose a supplier.

The sixth building block is *negotiation*. The goal of this building block is the completion of a good contract. The key activities performed by the client during the sixth building block include preparation for negotiations and conducting effective negotiations. Some good tactics followed during this stage include preparation of SLAs, price framework, and contract before choosing a supplier; requirement of the bidders to give exact wording changes and specifications they wish to negotiate, clarification and detailed explanation of the issues to be negotiated. Results of our research indicate that companies that followed these tactics were able to finalize negotiations in a couple of weeks, as opposed to companies that did not have a thorough plan of negotiations and their negotiations took months.

During the **operate phase**, the outsourcing deal is executed. The seventh and the eighth building blocks are key to this phase. The seventh building block is *transition*. The goal of this building block is to effectively and smoothly go through the change process in which the client is "handing over" services to the supplier. The key activities performed by the company during the seventh building block include: finalizing project plans, including resourcing the transition process (i.e. required number of employees, nature of expertise, type of equipment, infrastructure, etc.); managing the impact on staff (i.e. whose jobs will be affected and how); managing the staff transfers; managing knowledge retention and transfer; implementing the contract (i.e. service delivery on behalf of the supplier according to what has been agreed, knowledge input and payment on behalf of the client, and so on); engineering workflows; establishing communication channels; conducting acceptance and close-out (i.e. making sure that both parties are happy with the terms of the venture and that the agreement is operational); and

performing a post-implementation review (i.e. review of unexpected issues faced during the period of transition).

Some of the tactics that have been proved to be beneficial for the transition of employees include offering financial and career advice to the affected staff, including staff in the development of the supplier evaluation criteria, and involving staff in the supplier selection process. As an example of the successful transition of IT staff, an insurance company worked very closely with its supplier on how most of its 70 IT staff will willingly transfer to the supplier. On the one hand, the contract verified that the employment conditions at the supplier's organization would be the same in the insurance company. Furthermore, the transferred IT staff would be with the supplier organization for at least two years. On the other hand, the two parties tried to agree on a plan that would win the "hearts and minds" of the transferred employees. The supplier agreed to make presentations and familiarize employees with its operations. The staff would receive branded material such as hats, mouse pads, t-shirts, and training sessions, as well as the opportunity for one-to-one chats with the insurance company CIO. Key issues during the phase of transition are discussed in the second section of this chapter.

The eighth building block is *management*. The primary goal of this building block is to properly manage the outsourcing relationship. The key activities performed by the company during the eighth building block include investing in the relationship, ongoing monitoring of the relationship, diligent documentation and administration, risk management exercises, dispute management, continuous improvement procedures, and the evaluation of the supplier and client.

During the **regenerate phase**, the options for the next generation outsourcing contract and relationship are assessed. The ninth building block, which is *refresh,* provides a set of activities that assist the client to decide whether to re-engage in additional contracts with this particular supplier. The key activities performed by the company during the ninth building block include assessing contract outcomes and the lessons learnt, and the re-assessment of future requirements. As an example, a university tried to evaluate whether the benefits pursued through its five-year outsourcing deal had been actually achieved or not. Towards the end of this deal, the chancellor of the university conducted an assessment in order to decide on the future outsourcing plans of the university. Several issues occurred during this effort, as there were no monitoring reports and the people involved in the outsourcing negotiations had not remained at the university. To make matters worse, current stakeholders had different views on the objectives of the outsourcing venture. Consequently, it was very difficult to determine

the intended benefits of the outsourcing initiative as well as the extent to which they had been achieved. As a substitute, the contract manager enumerated the actual achievements and how they had been accomplished. These included:

1. The extent to which the supplier had performed in a satisfactory way. This is because the supplier was given responsibility for a process or a function (not just a task) and thus it was more efficient to measure business outcomes through Key Performance Indicators.
2. Supplier motivation through rewards.
3. Reduction of incidents due to the allocation of responsibilities between the parties in a clear and explicit manner.

Following this final phase, the lifecycle begins a new round. According to the decision of either re-tendering, re-negotiating, or backsourcing the work, the outsourcing lifecycle will be repeated with a particular pattern. If the outsourcing configuration differs significantly from the previous engagement, all stages of the outsourcing lifecycle may need to be repeated from the start. If the work is re-tendered with only minor changes, the organization may need to repeat the outsourcing lifecycle from the stage of vendor selection. If the firm decides to backsource the work, it would be appropriate to start from the transition stage. If the company is re-negotiating the same scope of work looking for an improved deal, the firm might start from the design stage and then move to the negotiation stage.

An alternative model of the outsourcing lifecycle (Figure 7.1) has been provided by the US General Accounting Office (2001). The model identifies seven main outsourcing phases as well as the major practices associated with each stage.

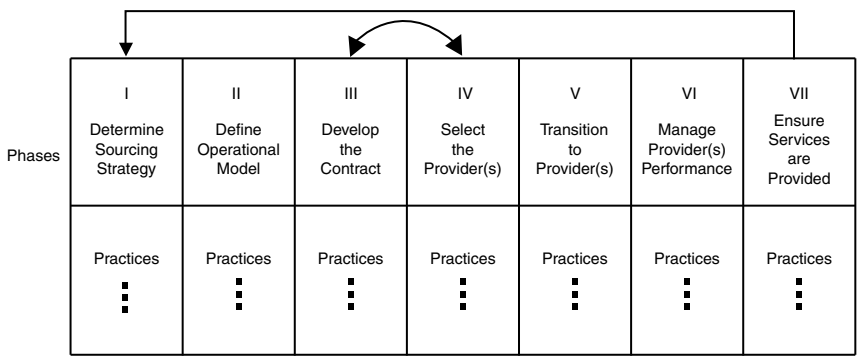


Figure 7.1 Outsourcing lifecycle

Source: Based on GAO, 2001

The main outsourcing phases and their major practices include:

I. *Determine sourcing strategy:* During this phase, client organizations determine whether it is more efficient to keep a function in-house or to source it to an external vendor. Table 7.2 illustrates the key practices concerned with this phase. As an example, GM initiated an outsourcing relationship with EDS and hired a corporate CIO to set the vision and strategy concerning the venture of the two companies. The CIO maintained that IT should be integrated into corporate strategy. As a result of the tighter integration between corporate and strategic planning, GM improved firm's ability to manage its outsourcing needs in a way that enables the company to adapt more easily to changing market conditions.

II. *Define operational model:* During this phase of the outsourcing relationship the client firm formalizes the executive leadership, the composition of the teams, and the operating relationship with the vendor. The operational model enables the client to compare the performance of the relationship against the original objectives. Table 7.3 illustrates the key practices applied during this phase. For example, in DuPont's case,

Table 7.2 First phase of the outsourcing lifecycle

	Key practices
Determine sourcing strategy	• Examine how IT will support business processes when evaluating sourcing strategies. • Use third-party assistance with experience in a variety of sourcing arrangements when formulating a sourcing strategy. • Incorporate lessons learned from peers who have engaged in similar sourcing decisions. • Estimate the impact of the sourcing decision on the internal organization as well as the impact on enterprise alliances and relationships. • Consider optimizing IT and business processes before deciding on a sourcing strategy. • Benchmark and baseline productivity of internal services prior to making the final sourcing decision. • Consider starting with a representative service or selective set of services to outsource; balance against economies of scale. • Determine the business reasons for outsourcing IT. • Determine the reasons for outsourcing IT that can improve the organization's ability to use and manage technology.

Source: Based on GAO, 2001

Table 7.3 Second phase of the outsourcing lifecycle

	Key practices
Define operational model	• Establish executive leadership for IT to facilitate the outsourcing initiative. • Make sure that the IT and business objectives are aligned. • Manage provider performance, including auditing provider performance data. • Define strategic objectives and consider the creation of a position responsible for strategic sourcing decisions. • Create and define contract management structure with operational points of contact and managers. • Have provider establish an on-site support team to serve as liaison between client and provider. • Train provider on client business environment and goals. • Select or develop standard tools for managing the relationship (e.g., performance scorecards, an enterprise resources management system). • Use third-party assistance to take advantage of expertise from a variety of outsourcing arrangements in defining the operational model (i.e., defining roles and responsibilities). • Understand the organizational structure of the provider and who is empowered to make decisions.

Source: Based on GAO, 2001

the corporate CIO is at the head of the structure managing outsourcing relationships and receives input from a collective leadership team. This team is composed of senior IT leaders across the company. The management structure also includes business unit CIOs and "functional" IT management groups that service each of the company's business units. This management structure aims to address issues regarding IT outsourcing while generating consensus between DuPont and its outsourcing providers.

III. *Develop the contract:* During this phase the legal terms of the outsourcing relationship are being established. The contract sets the obligations and expectations of each party. Ideally, the contract is intended to protect the interests of all parties and prevent opportunism. Table 7.4 illustrates the key practices in this phase. As an example, GM uses a Master Services Agreement (MSA) to structure its outsourcing arrangements with each of its primary vendors. During negotiations it uses a third-party consultancy and identifies some initial measures of performance that all three parties (GM, each of the vendors, and the consultant) have to agree upon. The measures of performance are reviewed monthly and adjusted when needed. The contract is very closely monitored and is periodically improved to elevate performance levels.

Table 7.4 Third phase of the outsourcing lifecycle

	Key practices
Develop the contract	• Base performance requirements on business outcomes. • Include measures that reflect end-user satisfaction as well as technical IT performance. • Review and update performance requirements periodically. • Require the provider to meet minimum performance in each category of service. • Require the provider to achieve escalating performance standards at agreed-upon intervals. • Incorporate sufficient flexibility so that minimum acceptable performance can be adjusted as conditions change, as the provider becomes more adept at satisfying customer demands, and as improvement goals are achieved. • Use service level agreements (SLAs) to clearly articulate all aspects of performance including management, processes, and requirements. • Specify circumstances under which the provider is excused from performance levels mandated by master service agreements.

Source: Based on GAO, 2001

IV. *Select providers:* During this phase of the outsourcing venture the client firm finds one or more providers who can help it reach its outsourcing objectives and chooses between them. Table 7.5 illustrates the key practices in this phase. For example, J.P. Morgan chose to select a team of providers. More specifically it chose three leading IT service providers and asked them to identify partners for providing efficient service delivery. The rationale of the company was that a single vendor could not provide them with the range of the services that it needed. Furthermore, the company maintained that a network of partners could accommodate fluctuations in its demands for service in a more efficient way.

V. *Transition to provider(s):* During this phase the client organization transfers responsibility for the IT functions to one or more providers. This phase involves a number of contingencies and for this reason a transition plan can make the transfer of the IT function relatively smoother. Table 7.6 illustrates the key practices in this phase. As an example, J.P. Morgan decided to transfer 1500 people (including existing contractors) to its new service providers. This process was planned jointly by all parties but was managed by J.P. Morgan. A management committee composed of J.P. Morgan senior executives and all provider companies was put in place to ensure that employees are transferred in a way that will result in minimal service disruption.

Table 7.5 Fourth phase of the outsourcing lifecycle

	Key practices
Select the provider(s)	• Conduct research on state of the market, vendors, and technology before defining vendor selection criteria. • Identify and evaluate various sourcing solutions (e.g., single vendor, multivendor, and alliance). • Define a process for selecting vendors to be providers (e.g., issuing a request for proposals and prequalifying vendors). • Define vendor selection and evaluation (acceptance) criteria at the outset (e.g., cultural fit, skill set, industry knowledge, proposed transition plan, past performance, and reputation). • When issuing a request for proposals, identify services with expected performance levels and define client and provider roles and responsibilities. • Use third-party assistance with expertise in a variety of outsourcing arrangements when selecting provider(s), including developing the request for proposals. • Conduct due diligence activities to verify vendor capabilities before signing the contract (e.g., conduct past performance and reference checks as part of the evaluation). • Make final vendor selections after contract negotiation.

Source: Based on GAO, 2001

Table 7.6 Fifth stage of the outsourcing lifecycle

	Key practices
Transition to provider(s)	• Communicate a clear transition process to all key players from both client and provider organizations. • Handle resistance to change with meetings between upper management and employees. • Establish client transition team with representatives from across the organization to facilitate the transition. • Create client/provider transition teams to address short-term transition tasks as required. • Encourage transition of staff to provider, where appropriate, using bonuses, stock options, and other appropriate methods. • Develop employee-retention programs and offer bonuses to keep key people, where appropriate. • Document key information to preserve organizational knowledge in the event that one or more providers change. • Use change management strategies to help client employees deal with the transition.

Source: Based on GAO, 2001

VI. *Manage provider's performance:* During this phase the client organizations make sure that the vendor is meeting performance requirements. Table 7.7 illustrates the key practices concerned with this phase. As an example, GM maintains a very close monitoring of the performance of its vendors through frequent meetings. During these meetings GM and its vendors discuss issues regarding quality and level of service as well as problems identified. The aim of these meetings is to ensure that both companies have a common understanding of the required service. Furthermore, a steering committee takes place every week, during which the program managers discuss problems and perform strategic planning. Frequent interactions with end users also facilitate the coherence between end user needs and service delivery.

VII. *Ensure services are provided:* During this stage the client firms make sure that services are provided as agreed and that end-user needs are met. Table 7.8 illustrates the key practices in this phase. It is important to note that there can be an overlap between this phase of the outsourcing relationship and the previous one (i.e. managing

Table 7.7 Sixth stage of the outsourcing lifecycle

	Key practices
Manage provider(s) performance	• Consider incentives to motivate provider(s) to exceed performance requirements (e.g., exceed number of hardware installations). • Use penalties to motivate provider(s) to meet performance requirements. • Periodically undertake studies to assess how the provider's performance compares with value being delivered to similar clients and the extent to which the provider's performance is improving over time (e.g., validate cost assumptions for multiyear contracts). • Schedule periodic working-level meetings with both the end-user groups and the provider to review provider's performance. • Conduct executive-level oversight meetings with the provider's senior management to review provider's performance. • Distribute performance data to stakeholders. • Reserve audit rights on performance data supplied by the provider. • Ensure that provider measures and reports on performance. • Work with provider to redefine service levels, as appropriate. • Sample performance data frequently enough to perform trend analysis and to permit extrapolation based upon historical data. • Allow employees and possibly stakeholders to rate provider on a regular basis (e.g., scorecards and quarterly report cards).

Source: Based on GAO, 2001

Table 7.8 Seventh stage of the outsourcing lifecycle

	Key practices
Ensure services are provided	• Monitor the provider's work to anticipate issues for resolution. • Conduct periodic meetings to resolve issues jointly with provider. • Document and maintain organizational knowledge. • Make sure provider uses the standard tools and processes defined as part of the operational model. • Use provider performance data to continuously improve processes. • Pursue improvement based on customer satisfaction surveys. • Have provider ensure that adequate and appropriate resources are available to perform services. • Ensure that an appropriately empowered individual from the client organization oversees work. • Set realistic time frames that are agreed to by the provider.

Source: Based on GAO, 2001

the relationship), as both phases in essence are related to making sure that the venture is being implemented in a way that will generate efficient service delivery. A very good illustration of the types of issues that companies are dealing with during this phase is the case of a major telecommunications company. The company aimed to ensure that it paid competitive rates. For this reason it maintained a very close monitoring of the fees that it paid to its vendors for a certain service versus the rates in the marketplace. This process led to a continual re-assessment and renewal of the fees, which allowed the company to save money in line with the industry-wide price reductions.

The two lifecycle models presented in this chapter are very similar. In essence they follow a very similar pattern regarding the different stages of the venture, while identifying various best practices to address key outsourcing challenges (namely, which activities should be outsourced and how, how vendor selection should take place, how the outsourcing relationship should be managed, and so on). However, the model developed by Cullen et al. (2005) appears to pay more attention to the final stage of evaluation and refreshment of the venture. In other words, it appears to be focusing on the different options that can be pursued by the client firm (backsourcing, re-negotiating, or re-tendering), and provides illustrations of the different routes that the organization may follow according to this decision. For this reason we believe that the Cullen et al. model might be better suited for

relatively short-term ventures, where issues concerning the regeneration of the venture are more frequent and relatively more prominent.

Managing the transition stage: Key issues and best practices

The transition stage in outsourcing is a phase of intense change, during which the client and supplier are setting up the governance structure of the outsourcing relationship and gradually the client is handing over the service to the supplier. Clearly this is one of the more risky phases in the relationship, which needs to be carefully examined. While Chapter 8 presents the key aspects involved in the management and governance of the overall outsourcing relationship, this section will focus on the aspects relating to the transition phase.

During the transition phase of outsourcing various types of risk are generated. These include financial risks (i.e. creation of additional costs because of the disruption of normal service delivery), regulatory risks (i.e. risks of not operating in compliance with wider regulatory standards, for example ISO), and operational risks (i.e. risks that present obstacles to the execution of operations). One of the most important operational risks associated with the transition phase is the transfer of knowledge. The most effective practices for managing knowledge transfer during transition have been described in Chapter 5.

In addition to the issue of knowledge transfer, it is particularly important for the client firm to manage its communication strategy accordingly. At the beginning of an outsourcing relationship, rumors could be spread and could affect employees' morale, productivity, and the corporate image. It is of vital significance that an effective communication strategy is put in place to prevent these damaging effects.

NeoIT (2005) suggested the following steps for dealing with communication challenges during the transition phase of global sourcing initiatives:

1. *Selecting the right communication vehicles:* When planning a communications strategy it is important to evaluate the different communication vehicles that are available to the organization and the way in which each of these vehicles can be deployed. Examples of communication vehicles include company newsletters, individual meetings, company-wide meetings, media, and press. Selecting the right vehicle for communication and deploying it in an efficient way is critical to the success of the communications strategy.

2. *Developing key internal messages*: Very often it is relatively difficult to communicate precise information with regard to the venture and its outcomes. However, even the communication of alternative scenarios, possible ranges, estimates and probabilities can be very useful. Communication should be iterative and evolving, beginning with relatively uncertain information and progressing toward more accurate content. Organizations that have been successful at communicating their global sourcing initiative have employed some of the following practices:
   a. *Resist communication that says nothing:* Communicating without saying anything concrete creates rumors and uncertainty. Empty communication decreases levels of trust and confidence in the leading team and creates resistance to implementation efforts. The content of communication efforts should aim to address the concerns of all stakeholders (both internal and external) and keep them as informed as possible.
   b. *It is better not to persuade:* The more a company tries to persuade people at the lower levels of the hierarchy with regard to the credibility and reliability of its decisions, the more untrustworthy it seems. Opinion leaders can play a mediating role between the business leaders of an organization and these employees. The challenge for the organization is to ensure that opinion leaders have some recommendations to make, that they are capable of communicating alternative scenarios and outcomes, and that they can advise their colleagues on how to deal with the subsequent changes. For example, in an insurance company the CIO played the role of the opinion leader and advised staff members who would be transferred to the vendor's site on their professional and financial concerns.
   c. *Painting a positive story does not always help:* A positive story may raise employee expectations; however if these are not met, employee morale is decreased and the implementation faces serious challenges. For this reason, communicating a positive story that is not met is worse than communicating a balanced story that is realized. As an example, an organization may communicate to its staff that some of them will be transferred to the vendor's site with very favorable employment conditions. If this does not happen, employees will lose their trust, they will resist implementation efforts, and most importantly they will develop a feeling of anxiety and uncertainty that will inhibit their productivity.
3. *Frequency of communication:* Although communicating a global sourcing initiative may not follow a fixed pattern, successful organizations

typically communicate to employees issues which are related to the initiative after the completion of each critical phase in the process. The frequency of communication should be related to the level of uncertainty associated with the global sourcing venture.

4. *Senders and receivers:* Organizations need to ensure effective message delivery. For this reason they should clearly identify the senders and receivers of messages. Senders of internal communications may include the CEO, human resource managers, line managers, and business unit heads. Senders of external communications may include the CEO, corporate communications department, or public relations department. With regard to receivers, internal receivers are mainly the company's employees at different levels of the organization, while external receivers involve customers, vendors, financial analysts, media, and the overall community. Mapping each set of senders to the appropriate receivers along with the right message is critical for the successful communication of information.
5. *External communications:* In the minds of many people, offshoring is associated with taking work out of the country. Along these lines, people tend to believe that companies engaged in offshoring initiatives are trying to achieve financial benefits at the expense of their national workforce. For this reason major global sourcing initiatives are highly likely to be faced with negative publicity. To mitigate this image-tarnishing effect, organizations need to develop a communication strategy that will send the sort of message that maintains the positive image and the goodwill of the company. For example, E-Loan represents the case of a company that was very effective in the management of its external communications strategy regarding its offshore venture in India. The Chief Privacy Officer of the company explained the rationale behind their offshore initiative by saying that "Essentially, as we close our business day in the US, India begins theirs. This 24-hour processing capability enables us to fund loans one to two days faster – in 10 days vs. 11 to 12 days – than if they were processed entirely in the US." He further noted that their customers were given the chance to choose if they wanted the entire transaction to be processed domestically or overseas. The effort of the company to communicate its philosophy with regard to its offshore venture was particularly effective in convincing its customers about its intentions. As the Chief Privacy Officer of the company explained, "Currently 87% of our customers are selecting the overseas option. ... While we believed that disclosing the program, providing a choice and explaining a time benefit would be appreciated by consumers, we didn't

think the numbers would be as high as they have been from the start. However, the results of our program support the idea that when you make the effort to explain the 'what', 'where' and 'why' to consumers, they are comfortable with it." Consequently, an effective communication strategy can help a firm avoid negative publicity and criticism, while maintaining its positive corporate image.

While the issues of knowledge transfer and communications are among the most prevalent ones during the phase of transition in sourcing ventures, IGate (2004) went a step further and suggested a more wide-ranging set of risk management strategies. More specifically these include:

1. *Put key contract terms into practice:* While outsourcing clients and suppliers spend much time in the design of the contract, it appears that in most cases after the contract is signed, clients and suppliers revert to contract and to some of the risk-mitigating practices only when things have gone terribly wrong. As a result, risk-mitigating practices, while identified in the contract, are never put into practice, or have been used only when it is already too late.
2. *Use scenario-based predictive modeling to identify and mitigate risk:* In most outsourcing relationships the partners do not undertake a vigilant identification of risks related to the project. This is not only because the identification of risks can be a very costly and time-consuming process, but also because it is almost impossible to predict all contingencies related to the relationship. For this reason it is fundamental that the client and supplier will agree on a systematic approach to mitigate those risks that are critical to the success of the relationship.
3. *Use monitoring and testing to detect unaddressed risks early:* Since it is very difficult to address all risks and contingencies during the outsourcing relationship, it is important to monitor the health of the relationship on an ongoing basis. Keeping a close track of key performance metrics can help detect risks early by picking up deviations beyond acceptable ranges and analyzing their source.
4. *Make the plan fit people transition, not vice versa:* While many of the risks that are identified during scenario planning can be mitigated, risks relating to people are harder to mitigate. Such risks tend to be more unpredictable and may be due to various factors. For example, the timelines in the transition plans should take into account not only the time needed for the technical aspect of the transition, but also the special

issues associated with making the transition of the people involved as smooth as possible. Knowing how people have responded in similar situations and what motivates people to accomplish a task on time may assist in mitigating people-related risks during transition.

5. *Build-in flexibility to the system to address common risks:* Establishing change management processes that come into effect only when things go wrong is not enough. The entire transition process should be designed to absorb some of the problems. Without this absorption capacity or flexibility built into the process, every little contingency can have a dramatic influence on the entire transition plan. Consequently, transition plans must be flexible enough and designed to accommodate changes to a certain extent.
6. *Have a broad plan to address potential contingencies:* If the previous practices are put in place, the outsourcing relationship will be flexible enough to absorb certain amount of changes. However, some changes may have more dramatic results and for this reason a contingency plan (even a broad one) should be put in place. Examples of such contingencies could be natural or man-made disasters, and dramatic shifts in the markets.

Summary

The outsourcing lifecycle framework is an imperative tool for practitioners. The framework provides a step-by-step guide, which integrates the strategic and the operational level of outsourcing objectives and results. The transition phase, which is the starting point of most outsourcing relationships, requires special attention. Failing to properly design and execute the transition phase will very likely result in additional challenges for both client and vendor as the relationship matures. In this regard, this chapter provides the most effective practices for transition and the entire outsourcing lifecycle.

Relevant teaching case

Feeny D. and Willcocks L.P. (2009), *"Managing Strategic IT-Based Outsourcing Projects: The CLASS Case in Financial Services"*, available in this book.

CHAPTER 8

Governance of outsourcing projects

Introduction

As mentioned in Chapter 7, while the outsourcing industry has demonstrated an impressive growth during the past years, quite a few outsourcing relationships have ended in poor results and some have even been terminated early. Both the professional press and academic publications have cited poor governance as a primary factor leading to these results. In this chapter, therefore, we focus on understanding governance issues involved in outsourcing projects and the practices that could further support formal structures. In particular, we review the following issues:

- the governing structures for outsourcing ventures;
- the roles involved in governing outsourcing projects;
- the most effective governance practices for outsourcing projects.

The governance of outsourcing projects

Governance of outsourcing projects concerns both vendors and clients. Governance refers to the processes and the structures that ensure the alignment of strategies and objectives of the parties involved. In most cases, governing processes and structures will facilitate the alignment of the client's objectives and strategies with the vendor's delivery system. However, governing structures and processes may also include aligning the goals and strategies of the client, intermediaries, and providers (e.g. in multi-sourcing settings). Clearly, as outsourcing projects become complex involving multiple vendors, sourcing arrangements, and geographical locations, the governing structures also need to be designed in such a way that they offer a wide range of opportunities to govern the relationships under various contexts and settings.

The set of tasks involved in governance structures is managerial in nature. Most books and consultants identify the following elements as critical for a healthy governing structure: the outsourcing organizational

structure, the communication channels, the control and monitoring frameworks, and the performance metrics. Both vendor and client should agree on the mechanisms put in place as governing structures. More importantly, the parties involved should also devise problem-solving mechanisms in case of breakdowns in these governing structures and processes.

The literature highlights some particular aspects in governing structures that require special attention regardless of the settings or geographical location of the outsourcing project. First, communication channels between the client and the vendor should be smooth and effective at all times. Second, trust and building rapport between the vendor and the client is essential for achieving healthy and effective collaborations. Last but not least, an effective and reliable reporting system should be maintained throughout the lifecycle of the outsourcing project.

Governing the outsourcing project can be an expensive activity. For this reason, clients consider the size of the project as one assessment criterion in their decision regarding the scope and complexity of the governing structure. Evidence suggests that outsourcing project with a total budget of US$ 50,000 and below will rarely be supported with a governing structure. However, most outsourcing projects will institute some elements of the governing structures; for example an account manager, to ensure coordination of activities and monitoring of results from the client side.

A key element in governing the outsourcing project is the *service level agreement* (SLA). The SLA is a legal document that details the services contracted to a vendor. It also defines aspects regarding the delivery of these services such as at what quality the services will be delivered and through what channels, using what methods. The SLA also provides a detail account of the conditions under which service can be disrupted. Clearly as services vary across firms and their delivery mode can be different depending on the vendor's capabilities, so the SLA is by no mean a static document. On the contrary, effective SLAs accommodate business needs for a change in the method and mode of delivery subject to changes in market conditions or client's strategic intent. However, such changes may put heavy burden on the vendor when attempting to meet client's needs. Therefore, we advise vendors and clients to build some flexibility into SLAs; however, assess the impact on the vendor should client's needs change.

SLAs are monitored on a "dashboard"; however, not as a simplistic indication whether the vendor has met the basic requirements but as a representation of achieving the business goals behind each SLA. For this reason, the "dashboard" is a Balanced Scorecard which provides an indication regarding business-orientated objectives. A simple example is a SLA

of a hosting service in which the vendor is required to provide support 7×24 hours. In such a case, the SLA will provide a detailed account of the specific elements relating to this service, the expected service quality, and the downtime allowed per each region. The "dashboard" will provide a general indication whether these conditions have been met. A "green" light on the "dashboard" would mean that the hosting service is provided without interruption, while a "red" light on the "dashboard" would mean that one or more of the conditions have not been met, therefore the service has been interrupted, and for this reason the client and the vendor should resolve this problem.

Setting up roles for the governing structures is often the responsibility of the vendor. Most large vendors have developed robust methodologies to govern complex outsourcing projects. The main governing body is the Global Office which often consists of numerous units that deal with Project Management (also known as Project Management Office), Quality Assurance (Quality Assurance Office), and the Infrastructure Office. The Global Office also consists of the Business Unit Officers that are responsible for each relationship based on their either functional or geographical area. For example, TCS set up a Global Office for its contract with ABN AMRO which accommodated Business Unit Officers for the Netherlands Business Unit (i.e. geography) as well as for Private Client Unit (i.e. functional). The client should set up a Project Management Office at the global level to coordinate activities and liaise with the Global Office of the vendor. In global outsourcing projects such roles will be replicated per each geographical location. It is also common that the vendor will locate its local offices near the client's site.

Figure 8.1 illustrates a governing structure typical of what most large vendors will propose clients to implement for offshore outsourcing projects. This governing structure shows that there are parallel roles between client personnel, onsite vendor personnel, and offshore vendor personnel. Also, this governing structure emphasizes the need to have corresponding roles at various levels. At the application maintenance and development, there is a need for corresponding roles that can liaise and coordinate work regardless of their physical location. At the portfolio level, there is a need for middle managers to align business objectives regarding ongoing maintenance and possible future development. A General Manager from the client side is usually responsible to manage and coordinate such efforts. At the strategic level, both clients and vendors should assign senior managers to assume strategic roles. The client CIO should ensure that the client's objectives are met by the vendor and that the client is providing the support needed to meet these objectives by the vendor. On the other hand,

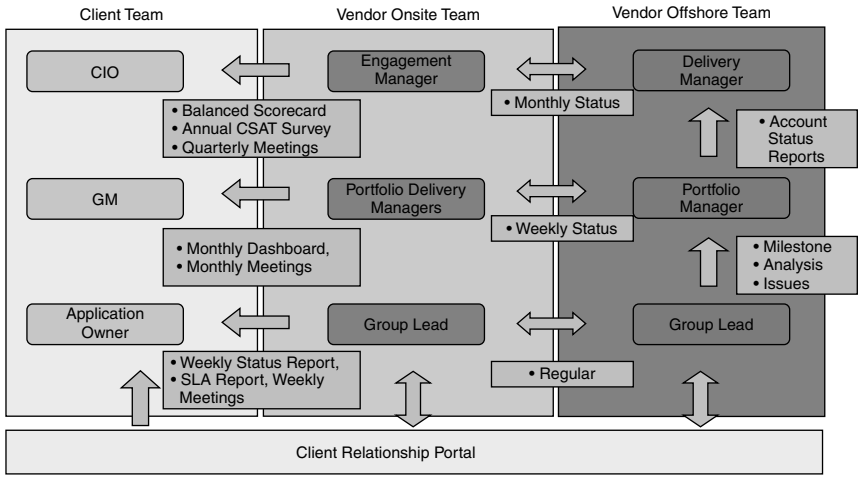


Figure 8.1 A governing structure on a large vendor

the vendor onsite engagement manager and the offshore delivery manager should assume equivalent responsibility on behalf of the vendor to meet client's expectations.

Most effective practices for governing offshore outsourcing projects

One can devise a governing plan and set up governing structures that should provide ideal conditions to achieve successful offshore outsourcing projects. However, this will not mean that the success of such projects can be guaranteed. Therefore, sensing what might not work and applying effective practices that are suitable for these particular settings could improve the impact that the governing structures described above would have on offshore outsourcing projects. Below, based on the empirical work of Rottman and Lacity (2006), we describe the most effective governing practices for offshore outsourcing projects:

1. *Development of the infrastructure:* Clients tend to underestimate the difficulty in integrating supplier employees based offshore into the work processes of their companies. While various sorts of security concerns, human resource issues, and management matters must be addressed before project launch, a special focus should be directed toward infrastructural issues. With regard to the infrastructural issues involved, the

project manager of one client company noted that "It really took us a long time to figure out how to make it [the on-boarding process] run smoothly. ... Since the suppliers needed access to systems from various business units and IT sectors, we had to cross organizational boundaries and create new protocols and rights profiles. However, without these processes, the suppliers sit idle waiting for us to build a tunnel in the VPN (Virtual Private Network). We should have had all these processes in place much earlier than we did" (Rottman and Lacity, 2006). Consequently, it is important that the client company facilitates the integration of offshore supplier employees by anticipating and managing infrastructural challenges before the initiation of the cooperation.

2. *Elevation of your own organization's Capability Maturity Model certification to close the process gap between you and your supplier:* CMM aims to foster the use of processes that standardize, predict, and improve IT software development. More specifically, CMM defines five levels of software development maturity (level 1 being the lowest), and identifies the sets of processes that need to be in place to achieve each of these levels. A number of clients suggest that the best way to extract value from the supplier's CMM processes is that the client itself becomes CMM-certified. The director of application development of a transportation company noted that, "A real problem we had was our CMM level 1.5 guys talking to the vendor's level 5 guys. So together, we have worked out a plan with our vendor to help bring our CMM levels up. When we do, it will be a benefit to both of us; our specifications will be better and so the vendor can use the more efficiently" (Rottman and Lacity, 2006). Along these lines, bringing the client's CMM levels up enhances the process of communication between the two parties, improves requirements specification, and thus facilitates efficiency in software development.
3. *Bringing in a CMM expert with no domain expertise to flush out ambiguities in requirements:* In many instances, the specification of the requirements of the client is a long and costly process. A major issue is that clients and suppliers may interpret the requirements differently. So, to reduce the iterations during the requirements specification stage an Indian supplier pursued a unique solution. The Indian vendor brought in a CMM level 5 expert to the client's site. Intentionally, the chosen expert did not have expertise on the client's business. This forced him to get into the process of clarifying ambiguities in the client's requirements and thus reducing the number of iterations for specification issues.

4. *Negotiation of a "flexible CMM":* Clients want to use only the CMM processes that will add value to their operations. As the project manager of one financial firm noted: "You ask for one button to be moved and the supplier has to first do a 20-page impact analysis – we are paying for all this documentation we do not need" (Rottman and Lacity, 2006). Suppliers recognize that their clients are not satisfied with the idea of following CMM patterns to their very last detail so that the supplier maintains the reliability of its CMM processes. The managing director of an Indian supplier noted "My clients are telling me: you do what you have to do to pass your audits, but I can't afford all of this documentation. So we have developed a "flexible CMM" model that maintains the processes necessary for high quality but keeps the customer-facing documentation and overheads to a minimum. Our customers have reacted favorably and our internal processes are still CMM 5" (Rottman and Lacity, 2006). Consequently, sourcing partners have to find the balance between the client's desire for flexibility and minimum hassle and the supplier's need to maintain the integrity of their operations.
5. *Use of an onsite engagement manager:* Studies suggest that onsite engagement managers contribute to the success of offshoring relationships. People in this role are familiar with the offshore supplier's culture, working style, and internal processes, and thus are able to smoothen the transition phase and contribute to the quality of the service provided. However, it is important that onsite engagement managers will also be included in the staffing and cost structure model. For example, Biotech, a major biotechnology firm, in its cooperation with an Indian vendor realized that it had to staff the project differently. A technical leader noted: "If this project was to be staffed by domestic contractors, we would have just added two new contractors. However, since we were new to offshoring, we priced in an Onsite-Engagement Manager (OEM) to interface between the business sponsors and the two offshore developers. We realized that all project cost savings were lost, but the OEM helped us improve our processes, interviewed and managed the developers and was responsible for status updates" (Rottman and Lacity, 2006). Although OEMs carry a significant cost, they can benefit the venture in many ways and thus ensure cost savings in the long run.
6. *Giving offshore suppliers domain-specific training to protect quality and lower development costs:* Although domain-specific training may dramatically increase transaction costs, it is necessary for clients to understand that these costs in essence protect quality and lower development

costs in the long run. The reason is that the supplier becomes more knowledgeable about the client's business and processes and consequently more productive. It is important to note, however, that the client has to make sure that trained employees remain on the account for a certain period of time, or the supplier should reimburse training costs.

7. *Development of governance metrics:* The need for governance tools and measures that consider costs, quality, time, risk, and rewards has been widely recognized by clients as a fundamental way to ensure outsourcing value. It is important to note that the metrics being used as governance tools as well as their specifications should be determined by the strategy and vision of the organization. Examples of metrics include "percent of supplier business," which measures how much of the supplier's revenues come from the client organization, the "comparative efficiency metric," which assesses the relative productivity of in-house staff relative to offshore employees, and the "bottom line metric," which assesses the impact of the outsourcing relationship on the client's business. It needs to be emphasized that a particular metric may mean something different to other organizations depending on their business strategy and philosophy. For example, for some clients the expectation is that the metric "percent of supplier business" will be high, providing a strong motivation for the supplier to deliver better service, while other organizations may want this metric to be low because they do not want their suppliers to be over-dependent on their business for revenue generation.

Another view on how to strengthen the foundation provided by the governing structures described above suggests that clients and vendors should focus on the development of the relationship between them (Liker and Choi, 2004). Some of the most effective practices to improve governance of outsourcing projects, and not only offshore outsourcing, are described below (based on Liker and Choi, 2004):

Conduct joint improvement activities

- Exchange best practices with suppliers.
- Initiate continuous improvement projects at suppliers' facilities.
- Set up supplier study groups.

Share information intensively but selectively

- Set specific times, places, and agendas for meetings.
- Use rigid formats for sharing information.

- Insist on accurate data collection.
- Share information in a structured fashion.

Develop suppliers' technical capabilities

- Build suppliers' problem-solving skills.
- Develop a common lexicon.
- Hone core suppliers' innovation capabilities.

Supervise your suppliers

- Send monthly report cards to core suppliers.
- Provide immediate and constant feedback.
- Get senior managers involved in solving problems.

Turn supplier rivalry into opportunity

- Source each component from two or three vendors.
- Create compatible production philosophies and systems.
- Set up joint ventures with existing suppliers to transfer knowledge and maintain control.

Understand how your suppliers work

- Learn about suppliers' businesses.
- Go see how suppliers work.
- Respect suppliers' capabilities.
- Commit to co-prosperity.

Ross and Beath (2005) support this view and argue that in developing relationship as part of the governing processes, clients and vendors should work out the difference between their expectations and the actual offering. Finding a middle way between client's expectations and vendor's offering was coined by these authors as "the sweet spot." Table 8.1 summarizes the sources of the differences between clients and vendors and offers some sweet spots for both parties to build and renew their relationship.

In BPO, Mani et al. (2006) have also argued that insufficient attention to governance is the main reason that some BPO projects fail to deliver value. There are three key dimensions that shape the nature of governance

Table 8.1 Client expectations, vendor offerings and the "sweet spot"

	Client expectations	Sweet spot	Vendor offerings
Transaction relationship	• Best practice • Variable capacity • Management focus on core competencies	• Low maintenance relationship • Reasonable margins • Innovation to ensure process improvements	• Standard best practice process components • Economics of scale • Distinctive assets
Co-sourcing alliance	• Cost savings • Access to expertise on demand	• Variable project staffing • Leverage offshore • Disciplined project management	• Labor arbitrage • Project management expertise • Expertise on specialized technologies
Strategic partnerships	• Cost savings • Variable capacity • Management focus on core competencies	• 1st choice provider moving up value chain	• Capability to deliver broad range of specialized series • Integration expertise • Disciplined practices • Economies of scale

Source: Based on Ross and Beath, 2005

structures required for BPO: interdependence between the processes, complexity of the process, and its strategic importance to the enterprise. More specifically:

1. The interdependence of a process with other processes refers to the extent that a business process works independently or affects/is affected by other processes.
2. Process complexity refers to how difficult it is to understand the specifics of a process and to measure its output.
3. The strategic importance of a process to an enterprise refers to the extent that a process has an impact upon its competitiveness.

The authors further explained that these three key dimensions of the outsourced process should determine the type of an outsourcing contract, the management of the relationship, and the technical capabilities, which they refer to as "key BPO governance capabilities." Table 8.2 summarizes guidelines for determining the necessary BPO governance capabilities.

For example, Merrill Lynch outsourced the restructuring of its wealth management workstation platform. This was a case of transformational BPO that involved high levels of process interdependence, complexity, and strategic importance. More specifically, there was a high process interdependence, because the new platform would have links among client management systems, call centers, and online service management.

Table 8.2 Guidelines for determining BPO governance capabilities

Governance capabilities	Governance guideline
Outsourcing contract	The BPO contract should take into account uncertainties regarding the outsourced process. If uncertainties regarding the process are high, it can be difficult to build comprehensive contingencies into the contract. Therefore, as uncertainty increases, the client must shift emphasis from controlling uncertainty through performance contracts to managing uncertainty through relational contracts. Independent processes, whose requirements can easily be described, can easily be disaggregated from other client processes. They should be owned and managed by the providers(s) that have the relevant process expertise. However, if the outsourced process shares interdependencies with other client processes, the requirements are more difficult to define. Furthermore, there are fewer opportunities for the provider to benefit from economies of scale. Thus, the outsourced process needs to be jointly owned.
Relationship management	Effective relationship management helps bridge cultural gaps between companies and fosters a collaborative working approach in BPO. The more strategic the outsourced process, the greater the need for more collaboration and the more comprehensive the approach to relationship management needs to be. The BPO relationship must strike a balance between coordination and control. The higher the process complexity and strategic importance, the more the emphasis needs to be on coordination and less on control.
Technical capabilities	Technical capabilities are measured by the scope and intensity of the use of IT and the sophistication of the coordination systems. These capabilities must be aligned with the contract type and the depth of relationship management. BPO relationships that need high technical support are those that require collaboration and transparency, have a strategic agenda, and aim to improve enterprise competitiveness.

Source: Based on Mani et al., 2006

Furthermore, the new platform would be particularly complex as it would accommodate 130 applications. Its importance to the organization was highly strategic as the new platform would facilitate the prioritization of work, something which was expected to benefit the company significantly. In particular, the new platform would enable the company's financial advisors to focus on the major clients while diverting the rest to the company's call centers or Web site.

In alignment with the high levels of process interdependence, complexity, and strategic importance, Merrill Lynch tried to develop a relational contract (i.e. a contract that emphasized the joint ownership of the outsourced process as well as the partnering nature of the venture) that would enable the BPO initiative to be adapted to changing business needs. Furthermore, it developed a partnering model of operations that involved

frequent communication and information exchanges from lower to top management levels. In terms of technical capabilities the BPO venture was very challenging and demanded intense client-supplier collaboration.

An example of transactional BPO would be the case of Qatar Airways, which outsourced its revenue accounting and recovery processes to Kale Consultants in India. The outsourced system was low in terms of process interdependence, complexity, and strategic importance. More specifically, the revenue accounting and recovery process could be disaggregated from the firm's value network, something that made it independent. Furthermore, it was a straightforward process with a low level of complexity. In terms of its significance to the competitiveness of the firm, it was considered a "strategically peripheral corporate function."

The low levels of independence, complexity, and strategic significance of the outsourced process were combined with low BPO governance capabilities. In other words, the company signed a clearly defined performance-based contract with its supplier. The management of the relationship relied on SLAs. Furthermore, Qatar Airways did not need to make any technological investments. The new system interfaces required only the exchange of transactional data such as manual tickets, coupons, and billing data.

Table 8.3 summarizes the BPO governance models of Merrill Lynch and Qatar Airways, as well as their attributes.

Table 8.3 Characteristics of two governance models

Governance model	Process requirements	Governance capabilities
Transformational BPO	High interdependence	Contract- Relational contract emphasizes joint ownership of the outsourced business process.
	High complexity	Relationship management- Partnering model marked by relational emphasis on coordination and high levels of information exchange, joint action and commitment between the client and provider.
	High strategic importance	Technological capabilities – High technological capabilities
Transactional BPO	Low interdependence	Contract – Arm's-length performance contract emphasizes transfer of ownership of the outsourced process to the provider.
	Low complexity	Relationship management- Relationship marked by emphasis on control and low levels of information exchange, joint action and commitment between the client and provider.
	Low strategic importance	Technological capabilities – Low technological capabilities.

Source: Based on Mani et al., 2006

On this basis, according to the findings by Mani et al. (2006), in BPO, processes that are characterized by high interdependence and complexity and that are of high strategic significance should be combined with high governance capabilities (transformational BPO). On the other hand, processes that are of low interdependence, complexity, and strategic significance should be combined with low governance capabilities (transactional BPO). Misalignment of governance capabilities relative to these process dimensions would yield poor results.

Summary

This chapter focused on the governing structures and processes in various outsourcing settings. While the first part of this chapter emphasized the formal approach of governing structures and the traditional way to setting up roles and communication channels, the second part of this chapter is dedicated to the relational aspects involved in governing outsourcing projects. Clearly, investing in both formal governing structures and informal relational mechanisms will only improve the results expected from governing outsourcing projects.

Relevant teaching cases

Feeny D. and Willcocks L.P. (2009), *"Managing Strategic IT-Based Outsourcing Projects: The CLASS Case in Financial Services*," available in this book.

Jaiswal, V. and Levina, N. (2008) *"JIT Full Circle Outsourcing,"* in: IT Outsourcing – Impacts, Dilemmas, Debates and Real Cases in A.L. Albertin and O.P. Sanchez (eds.), Editora FGV, Sao Palo, Brazil. Also available from the author's website: http://pages.stern.nyu.edu/~nlevina

CHAPTER 9

Managing globally distributed teams

Introduction

Globally distributed work is an integral part of offshore outsourcing. Offshoring and offshore outsourcing often imply that client and supplier teams need to work together in a globally distributed fashion. In such cases, some teams will be based onshore, either at the client's site or at the supplier's onshore site, and others will be based offshore, for example in Mumbai, India. To define them, *globally distributed projects* are projects that consist of two or more teams working together from different geographical locations to accomplish project goals. These teams face major challenges on various fronts, including cultural differences, language barriers, national traditions, values, and norms of behavior. Therefore, this chapter will focus on the following aspects:

- the challenges distributed teams such as offshore outsourcing teams face;
- the methodologies available for managing globally distributed teams;
- the role of face-to-face meetings in facilitating collaboration and other social aspects that matter for distributed collaboration;
- the tools and technologies available to support distributed collaboration;
- what client firms can do to help build truly collaborative teams.

Challenges faced by globally distributed teams

In fact, research on the management of globally distributed teams, such as offshore and onsite teams or front-office (onshore) and back-office (offshore) teams, has tended to focus on issues pertaining to the geographical dispersal of work. Naturally, because of several constraints associated with globally distributed work, such as distance, time-zone, and cultural differences, traditional coordination and control mechanisms tend to be less effective in globally distributed projects. Distance reduces the intensity of communications, in particular when people experience problems with media that cannot substitute for face-to-face communications.

Cultural differences expressed in different languages, values, working and communication habits, and implicit assumptions are believed to be embedded in the collective knowledge of a specific culture, and thus may cause misunderstandings and conflicts. Time-zone differences reduce opportunities for real-time collaboration, as response time increases considerably when working hours at remote locations do not overlap. Therefore, receiving an answer to a simple question may take far longer than in co-located projects.

The relevant literature has reported problems and breakdowns in various areas encountered by globally distributed teams, including offshore-onshore teams. The main challenges that globally distributed teams face are:

- Breakdown of traditional coordination and control mechanisms.
- Loss of communication richness (Cramton and Webber 2005); limited opportunities for interactions; leaner communication media (Espinosa et al. 2007).
- Lack of understanding of counterpart's context and lack of communication norms in coordinating distributed teams. In particular, the risk factors in offshore outsourcing scenarios are client-vendor communication (i.e. miscommunication of original set of requirements, language barriers, and poor change management controls), client's internal management issues (i.e. lack of top management commitment, inadequate user involvement, lack of offshore project management know-how, poor management of end-user expectations, and failure to consider all costs), and vendor capabilities (e.g. lack of business and technical know-how by the offshore team).
- Language barriers (i.e. different competencies in language) (Sarker and Sahay 2003).
- Misunderstandings caused by cultural differences, e.g. different conversational styles, different subjective interpretations (Lee-Kelley and Sankey 2008).
- Dissonance or conflict, e.g. task or interpersonal conflict (Lee-Kelley and Sankey 2008).
- Loss of team cohesion and motivation to collaborate, e.g. decreased morale and lack of trust.
- Asymmetry in distribution of information among sites (Carmel 1999).
- Difficulty to collaborate due to different skills-sets and training methods, various tools, technologies, and IT infrastructures (Sarker and Sahay 2004).
- Lack of informal, interpersonal communications (Cramton and Webber 2005).

- Difficulties to work across different time-zones (Lee-Kelley and Sankey 2008).
- Delays in distributed collaborative work processes. This is often described in terms of unproductive waits for the other side to respond with clarifications or feedback, which can be the result of time-zone differences but may also be because of different interpretations of priorities, in particular when local and global priorities compete.

Some studies have described in depth some of the challenges reported above. For example, Oshri, Kotlarsky and Willcocks (2007b) describe how Baan, a software development firm based in the Netherlands that offshored software development to India in the late 1990s, was struggling to create successful collaboration between the Dutch team and the Indian team. One problem area described by the Indian counterparts was the lack of ownership of the product that affected the Indian team's motivation to perceive themselves as part of the Baan global team. The Indian engineers kept referring to their Dutch counterparts as "them" and portrayed the relationships as if these were between a client and a vendor.

In another study, Kotlarsky et al. (2007) described the challenges regarding knowledge sharing between onshore and offshore teams involved in component-based development. In this study, the authors showed that while the common wisdom regarding distributed component-based development suggests that each site should take responsibility for a particular component, in reality, as illustrated by TCS, the Indian IT service provider, success stories are actually based on a development methodology that encourages the joint development of a component by more than one site. As a result of such methodology, remote sites, such as TCS's onsite team in Zurich and their offshore team in Mumbai, developed collaborative methodologies that sped up the development process as well as produced a highly reusable components.

A study by Oshri, van Fenema and Kotlarsky (2008) has illustrated the challenges involved in co-developing software across remote sites. In this study the emphasis is on the transfer of work-packages between onsite and offshore teams. While recent years have witnessed a growing dependency on the codification of knowledge and therefore the transfer of documentation back and forth between onsite and offshore teams during the various software development stages, Oshri et al. (2007b) show that the codification of knowledge is not sufficient for successful collaboration. Successful teams, such as at SAP, the German software warehouse, have combined informal and formal mechanisms to support collaborative software development.

To summarize, the challenges that globally distributed teams face are many. In particular, offshore and onsite teams may experience these challenges to a greater extent because of the cultural and time-zone differences and the effects of the local context against the importance of the global priorities. While such challenges may have an effect on the performance of the global team, many such teams have introduced and implemented methodologies and tools to help cope with such challenges. The following section first describes the methodologies, followed by a section on the tools used by globally distributed teams.

Methodologies for globally distributed teams

Consider again the case in which software is developed by a globally distributed team, part of which is located in the Netherlands and the other part in India. Historically, software systems have been developed following a Waterfall approach, which prescribes a number of phases to be followed in a sequential manner: requirements analysis and specifications, conceptual design, coding and testing, as illustrated in Figure 9.1.

There are other methodologies for software development that facilitate concurrent development based on organizing tasks in an overlapping (parallel) mode, or for contract-driven software (developed for a specific customer, as opposed to off-the-shelf, sometimes customizable, software systems) those methodologies that aim to increase user participation in the development process, such as Joint Application Development (JAD), Rapid Application Development (RAD), and prototyping. Clearly, the choice of which development methodology to follow would have implications for the way development work will be divided and integrated across the various sites involved. In particular, organizing sequentially dependent tasks to be conducted in parallel changes the way tasks are coordinated and controlled. For example, overlap between tasks means that developers cannot check the output from preceding tasks and compare this to standards, and therefore would need to rely on interpersonal communications. In a globally distributed environment work is divided between teams and individuals

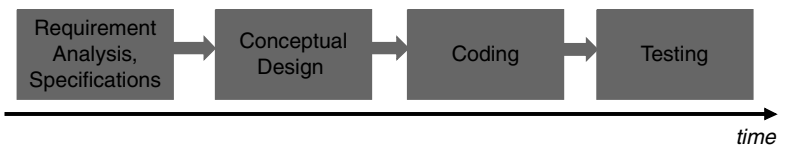


Figure 9.1 The Waterfall approach: traditional software development lifecycle

at multiple geographically dispersed locations, and thus coordination and integration of work need to be done across these remote locations. This results in the delay of work completion time, as distributed tasks appear to take longer to complete compared to similar tasks that are co-located. More recently, there has been growing evidence that agile software development practices seem to be effective in reducing the delays associated with inter-site communication and coordination.

In fact, many of the methodologies developed for globally distributed software development teams concern with the coordination challenges that these teams face. These methodologies, therefore, are known as inter-site coordination methodologies. We now describe some of these methodologies in depth.

Inter-site coordination for globally distributed software development teams

There are three key areas within which solutions have been developed for software development that is carried out in a distributed manner. These areas are (i) division of work, by which the coordination and integration of work conducted at remote locations can be made easier, (ii) coordination solutions for distributed environments, and (iii) communication patterns aiming to make inter-site coordination more efficient, through planning systematic communication between remote counterparts and establishing rules of communications. These three areas of solutions are now discussed below.

Division of work

Typically, strategies to divide work between remote locations are such that their main objective is to reduce the need for inter-site coordination and communications. So, these are the most commonly mentioned strategies for the division of work in globally distributed teams, in the specific context of software development:

Division of work by *phase/process step,* when globally dispersed sites engage in different phases of a project in a sequential manner. This means that work is handed over to a remote site after completing certain process steps. For example, requirement analysis may take place in a front-office located in New York, after which specifications will be transferred

to Dublin for the conceptual design and then coding will be carried out in Mumbai. Figure 9.2, which we refer to as Scenario A, illustrates this strategy:

> Division of work by *product structure (product module),* when each product module/feature is developed at a single site. This approach allows for different sites to work on different modules in parallel. Figure 9.3 illustrates such a scenario (Scenario B), when a system is divided into modules (typically different product functions) and each module is allocated to a different site. For example, while the requirement analysis is

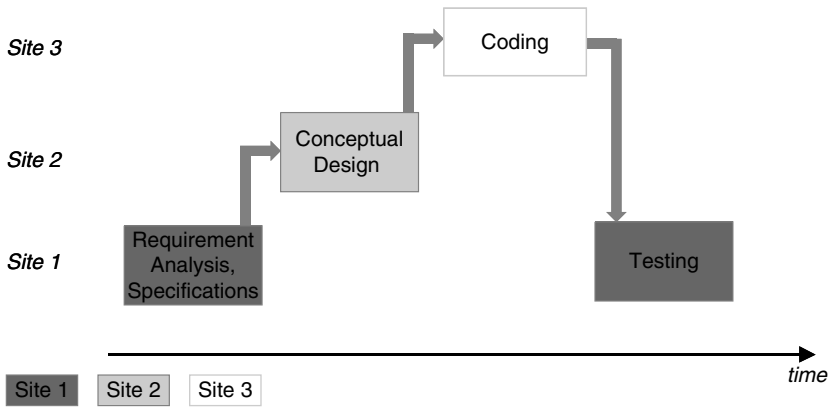


Figure 9.2 Scenario A – Globally distributed software development which is organized *by phase / process step*

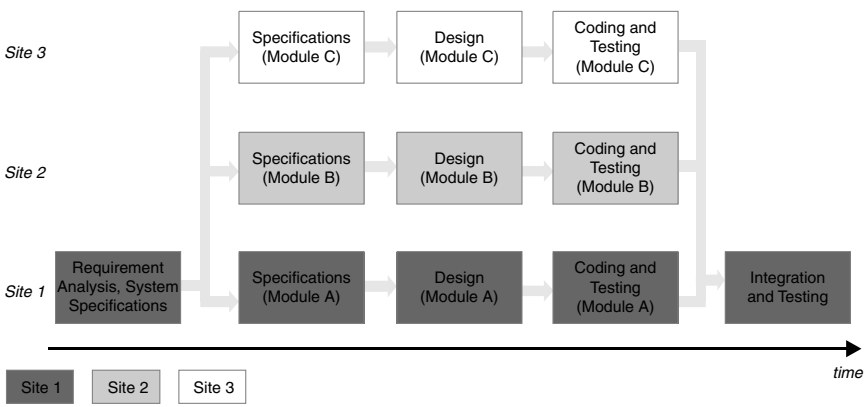


Figure 9.3 Scenario B – GDSD organized *by product structure (product module)*

carried out in London, the specifications, design, coding, and testing of the three key modules of a complex system will be carried out in Ireland, India, and Russia respectively.

We wish to emphasize that structured, well-defined tasks are more suitable to be allocated by *phase/process step*, while abstract (unstructured, loosely defined) tasks are more appropriate to be allocated *by product structure (product module)*.

Division of work that *minimizes requirements for cross-site communication and synchronization;* however, only for particular types of product architectures. The philosophy behind this practice is that "tightly coupled work items that require frequent coordination and synchronization should be performed within one site" (Mockus and Weiss 2001). Figure 9.4 illustrates such a scenario (Scenario C) in which some tasks require frequent coordination. In this example, requirements analysis and specification, conceptual design and integration, and testing are all conducted at one site, and only well-defined tasks (coding and testing of different modules) are conducted at two locations in parallel.

Division of work based on *product customization*, so that one site develops the product and other sites perform customization, that is, changes such as adding features and enhancements for specific customers. In such a case, the sites that customize the product are in a geographical proximity to the customer. Figure 9.5 illustrates this scenario (Scenario D), in which, for example, a system is developed in one location (site 1), and other globally dispersed sites customize the system for specific customers (site 2) or for local markets (site 3).

Division of work across time-zones; where a task is passed on from one person to the other person located in a different time-zones at the end of a working day to reduce the project completion time and improve the resource utilization through 24-hour development (Jalote and Jain 2006).

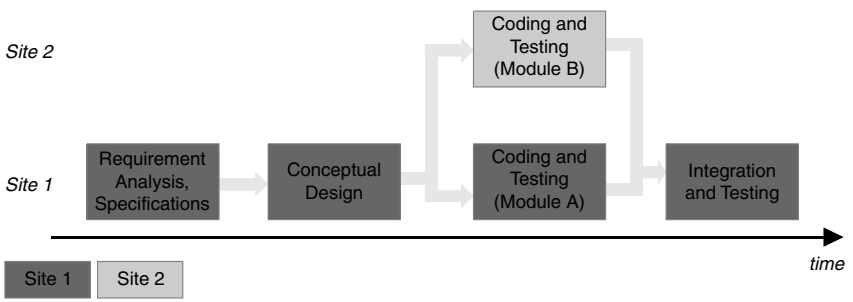


Figure 9.4 Scenario C – Only well-defined tasks distributed across locations

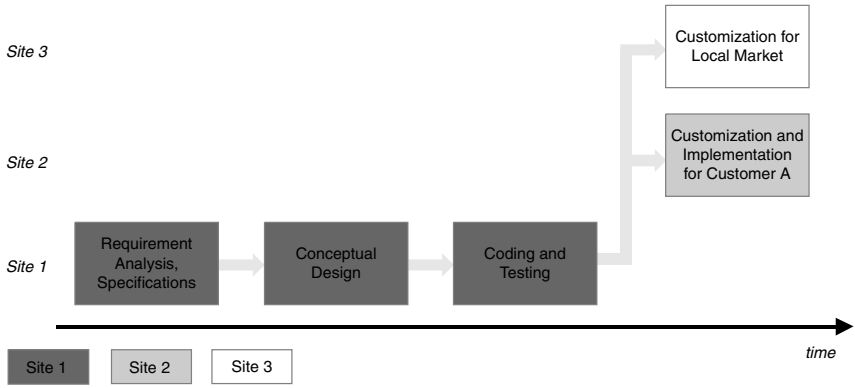


Figure 9.5 Scenario D – GDSD based on *product customization*

Clearly, offshoring projects that work with onshore teams have a range of work division practices to rely on in making a decision regarding where to place activity X and how such a decision will affect the mode of collaboration between onshore and offshore teams. The following section will describe the coordination mechanisms for globally distributed teams.

Coordination mechanisms

Offshoring and offshore outsourcing projects also face coordination challenges, as described above. Past experience has resulted in a number of strategies that can help such teams to cope with these challenges. Some of these coping strategies are as follows:

- An explicit, documented, and formalized project process: standardizing and documenting the development methodology, distributing it across sites, and storing it in a shared repository; educating all team members about the chosen methodologies. A recent study we conducted at Capgemini showed that front-office teams, based in the Netherlands, were facing major challenges collaborating with back-office teams, which were based in India, because of the lack of standardized approaches to development methodologies.
- Promoting task-related interaction by encouraging interdependence and reliance on one another among the members of distributed teams. Our study at TCS has shown that this practice is particularly successful between onsite and offshore teams.

- Providing approaches that can coordinate distributed software development tasks, such as integration centric engineering process which aims at managing crucial dependencies in distributed software development projects (Taxén, 2006).
- Adopting a more structured project management approach. Ghosh and Varghese (2004) propose a project management framework that is based on process restructuring, where it can be used efficiently for managing and tracking the distributed development of a large-scale projects.
- Encouraging visits to remote sites and face-to-face meetings (Malhotra and Majchrzak 2005). In a study we conducted at SAP, TCS, and LeCroy, we noticed that while face-to-face-meetings are important, it is far more important to build a socializing system within which remote teams renew social ties and re-socialize after a kick-off meeting and after each project meeting. In this regard, remote teams need to re-norm and to re-establish a shared team identity (Oshri, Kotlarsky and Willcocks 2008).
- Establishing liaisons between remote locations.
- Creating transparency in project goals and company vision.
- Identifying different modes of task assignment mechanisms: self-assignment, assigning to others, and consulting with others (Crowston et al., 2007).
- Building awareness of the work conducted at remote sites by making project plans accessible over the Web. Also, building awareness of who is doing what by creating a Web-page for each team member with personal information. Lastly, sharing the local context with the global team by providing information about, for example, local working hours and holidays.

These coordination practices will help remote teams to avoid the pitfalls often associated with distributed work. However, agreeing on communication styles and setting up communication protocols is another important area in the management of globally distributed team. The following section will focus on this aspect.

Communication practices

There has been extensive research on the communication patterns that could either positively or negatively affect collaboration between remote counterparts. In this section, we summarize the results of this research by mainly focusing on the practices that can lead to successful collaboration between globally distributed teams, in particular:

- Scheduling systematic phone-/video-conference meetings between remote counterparts, including managers and team members.

- Establishing communication protocols that cover the ground rules and expectations concerning communications. In our research, we have observed that SAP held team-building meetings between German and Indian counterparts during which part of the discussions were dedicated to the remote teams agreeing and accepting certain communication protocols.
- Providing appropriate training and access to collaborative tools and communication technologies.
- Being clear and patient in communications, as counterparts might not be able to comprehend and communicate in English.
- Investing in language and cultural training. For example, LeCroy, the New York-based firm, has invested in language training of their Geneva-based engineers (Kotlarsky and Oshri, 2005).

Clearly, global firms are becoming more aware of the need to develop communication skills as one enabling factor of successful collaboration. The range of practices available is growing, and we have dedicated our discussion to the more commonly applied practices. However, another critical element in supporting globally distributed work is the tools and technologies implemented and used by remote teams. The following section will describe this aspect.

Tools and technologies for globally distributed teams

There are numerous tools and technologies that have been introduced to overcome the challenges reported above. The main tools and methodologies applied in globally distributed contexts are (i) a powerful *ICT infrastructure* that allows the transfer of data at high speed, (ii) *generic collaborative technologies* enabling remote colleagues to connect and communicate, and (iii) *software engineering tools* that support software development activities conducted in parallel at remote locations. We now describe each group in detail.

ICT infrastructure

A reliable and high bandwidth ICT infrastructure is required to ensure connectivity between remote sites. ICT facilitates the process of boundary crossing to overcome the challenges presented by remote and culturally diverse team members. It is believed that ICT in particular mitigates the negative impact of intercultural miscommunication and could support decision making in distributed environments.

Collaborative technology

There are many collaborative technologies for global teams. Below is a list of some of the more commonly applied technologies:

- Teleconferencing, often combined with e-meeting
- Virtual whiteboards
- Email
- Chat (Instant Messaging)
- Voice over Internet Protocol (VoIP)
- Videoconference
- Internet/intranet
- Group calendar
- Discussion list
- Electronic meeting system

Collaborative technologies recommended for global teams can be classified according to time and space dimensions. One could consider these collaborative technologies based on the following four categories: *same place/same time,* in which collaborative technologies are for colocated group decision support; *same place/different time,* in which workflow systems are used; *same time/different place,* in which telephone and chatting technologies are mainly applied; and *different place/different time,* of which bulletin boards are one example.

A more extensive and elaborative classification of collaborative technologies is presented in Table 9.1. In this framework there is a distinction between several types of collaborative technology that support the different needs of globally distributed teams in different time/place settings.

Tools that support software engineering

In addition to collaborative technologies that are generic to a great extent, a number of tools specific to software development are central to supporting globally distributed teams involved in software development. The most commonly suggested tools are

- Configuration and version management tool
- Source-management system
- Document management system
- Replicated databases / repositories

Table 9.1 Types of collaboration technology

		Setting	
	Different place/ different time (off-line), i.e. *support between encounters*	**Different place/ same time (on-line), i.e. *support for electronic encounters***	**Same place/ same time, i.e. *support for face-to-face meetings***
Communication Systems: *aim to make communications between remote people easy, cheap and fast*	fax email voice-mail video-mail	telephone mobile phone desktop-video video / audio-conferencing systems (multi-point) chat system	
Information Sharing Systems: *aim to make the storage and retrieval of large amounts of information quick, easy, reliable and inexpensive*	document sharing systems computer conferencing	tele-consultation systems application[s?] for searching remote information sources	presentation systems
Collaboration Systems: *aim to improve teamwork by providing document sharing and co-authoring facilities*	co-editing systems	shared white-board, CAD, word-processing or spread-sheet	Group Decision Support Systems
Coordination Systems: *aim to coordinate distributed teamwork by coordinating work processes*	Synchronizers: group calendar shared project planning shared workflow system	awareness / notification systems (e.g. 'active batch')	command and control centre support systems
Social Encounter Systems: *aim to facilitate unplanned interactions*		media spaces virtual spaces	

Source: Adapted from Huis et al., 2002

- CASE tools that support the modeling and visibility of design
- Integrated Development Environment (IDE) toolset, which combines tools such as editor, compiler, debugger.

These tools ensure consistency in the product and development environment across dispersed locations, such as front-office and back-office teams. In fact, there are additional possibilities to improve collaborative work provided by collaborative engineering tools by adding generic collaborative tools, such as e-mail, Instant Messaging (IM), screen sharing, and a configuration management tool, to the tools reported above.

Socialization and the role of face-to-face meetings in globally distributed teams

While the concept of globally distributed projects implies that team members work over distance, typically some of them do have an opportunity to meet in person. Studies that have focused on social aspects in globally distributed projects have suggested that firms should promote and hold face-to-face (F2F) meetings to tighten interpersonal ties between remote counterparts in an attempt to improve collaborative work (Oshri et al. 2007b). Indeed, creating and renewing social ties between remote counterparts may open additional channels, supplementary to the technical solutions proposed above, through which collaborative work can be improved. Using F2F meetings to advance social ties in globally distributed teams may also improve the formation of a globally distributed team as members get to know each other during these meetings, learn about cultural differences between members of the team, discuss and agree on ways to resolve tensions, set up procedures to coordinate work activities and start working together toward a successful completion of a project. We have observed that supporting interpersonal contacts between remote counterparts throughout the project lifecycle is rather challenging. This indeed poses a challenge to managers as to how social ties can be created and renewed throughout the project lifecycle. So far, the emphasis from practice and research viewpoint has been on F2F meetings that serve as a stage for bonding and socializing between remote counterparts and as a vehicle for creating social ties between remote counterparts. Nonetheless, we argue that F2F meetings alone may not create the conditions through which interpersonal ties such as trust and rapport between remote counterparts can be created and renewed. F2F meetings tend to be short and often last only a couple of days. The agendas for these meetings often revolve around project and technical issues that need to be resolved, leaving little space for socialization and one-on-one meetings. The emerging challenges in creating social ties between members of globally distributed teams are as follows:

- F2F meetings are *short* and tend to offer only limited social space that accommodates cultural differences.
- Most time spent in F2F meetings is dedicated to project procedures and technical issues (i.e. they are *formal* to a great extent).
- F2F meetings are *selective* in the sense that not all counterparts are invited to F2F meetings.

- Short and infrequent F2F meetings offer *sporadic* interpersonal interactions between remote counterparts, which restrict the build-up of interpersonal relationships.
- ICT offers limited opportunities for personal contact and social space, as compared to F2F meetings.

While F2F meetings assist in acquainting counterparts of globally distributed teams with each other and addressing project and technical issues, these meetings, being *sporadic*, *short*, *selective*, and *formal* to a great extent, hardly support the long-term build-up and renewal of interpersonal ties between dispersed counterparts. Therefore managers of globally distributed teams need to pay attention not only to planning of the actual F2F meetings but also to activities that can be carried out over distance before and after F2F meetings to help making the most of the F2F meetings and facilitating build-up and renewal of social ties in global teams. Table 9.2 below summarize activities that we recommend to implement before, during and after F2F meetings on individual, team and organizational levels.

Table 9.2 Individual, team and organizational activities supporting social ties

	Before F2F meeting (introduction stage)	**During F2F meeting (Build-up stage)**	**After F2F meeting (Renewal stage)**
Individual	• Increase awareness of communication styles • Offer language courses • Offer short visits of individuals to remote locations	• Create space for one-on-one interactions • Provide sense of importance to each member • Adjust communication styles	• Ensure real time communication channels • Ensure mixed audio and visual cues • Offer short visits to remote locations • Offer temporary co-location
Team	• Introduction of new team members • Increase awareness of team composition • Increase awareness of communication protocol • Appoint contact person per remote team • Set up mini-teams • Offer virtual F2F meetings	• Conduct kick-off meeting • Discuss differences between national and organizational cultures • Offer space for multiple interactions between counterparts • Offer team-building exercises • Organise social events • Discuss organizational structure	• Facilitate reflection sessions • Facilitate round-the-table discussions • Facilitate progress meetings • Conduct virtual F2F meetings • Offer F2F meetings
Organizational	• Distribute newsletters • Create and offer shared cyberspaces	• Support sharing of information from F2F meetings (e.g. photos)	• Encourage direct communication channels
Tools	Phone/teleconference, VoIP, email, Groupware tools, knowledge repositories, shared databases, videoconference, on-line chat, intranet		

The before, during and after F2F meetings activities described above provide insights into the way how managers of global teams can supplement collaborative tools and methodologies with human-related activities to ensure the build-up and renewal of social ties between remote counterparts. We suggest that firms can move on from the traditional focus on F2F meetings as the main vehicle through which interpersonal ties are created, and can invest in before and after F2F meetings activities. In this respect, the full lifecycle of social ties should be considered by managers when planning and executing collaborative work between remote sites. The lifecycle of social ties consists of three stages: *introduction*, *build-up* and *renewal* (as shown in Figure 9.6). Each step represents an array of activities (presented in Table 9.2) that a globally distributed team may apply in order to move from the introduction stage to the building-up of social ties, and finally to the renewal phase in which social ties are renewed through various activities during and after F2F meetings (Oshri et al. 2007b).

Managers should first assess at which stage the dispersed team is, prior to embarking on the introduction of specific activities. For example, dispersed teams that are in the introduction stage (e.g. newly formed teams such as SAP team we investigated that included members located in Walldorf (Germany), Bangalore (India) and Palo Alto (US) that did

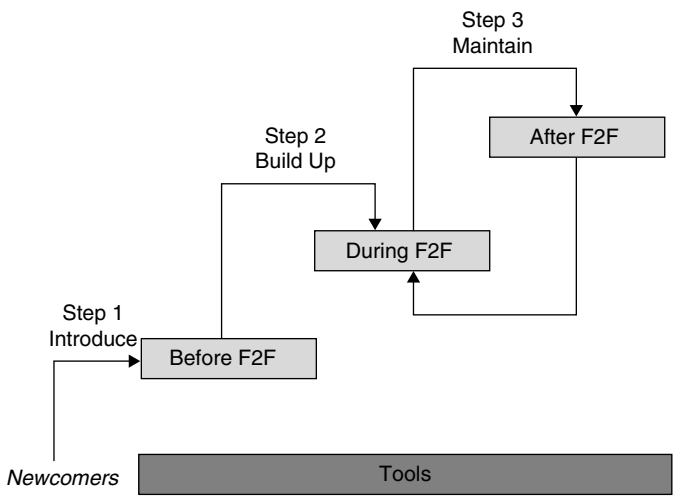


Figure 9.6 The lifecycle of social ties in globally distributed teams

not have any prior experience of working together) require different types of activity that support the build-up of social ties than teams that are in the renewal stage, such as LeCroy team that consisted from members located in NY (US) and Geneva (Switzerland) who had long history of working together over distance on various projects (Oshri et al. 2007b).

Furthermore, as the project progresses and remote counterparts get to know each other, establish interpersonal ties and a collaborative mode, renewing these social ties may require only a sub-set of the activities offered in Table 9.2. In this regard, the activities offered in Table 9.2 are not a recipe for building and renewing social ties but rather represent a set of possibilities available to managers from which to make a choice when attempting to strengthen social ties between team members. We argue that each team and team member differs in the way they bond with others, thus requiring a different set of activities that support the renewal of these social ties. It is the manager's responsibility to sense, analyze and apply the most appropriate activity at the right time, to ensure that social ties are renewed and the collaborative work is improved.

From a social ties perspective, we observed that globally distributed teams had to "re-norm" from time to time, mainly because newcomers joined and changed the dynamics of interpersonal ties within dispersed teams; in addition, disagreement and miscommunications arose even in a late stage of the project because of a lack of F2F interactions that resulted in fading interpersonal ties. For this reason, we recommend managers to consider "re-norming" dispersed teams and renewing social ties through bonding activities, such as short visits or F2F meetings. These activities, we have learned, should be offered not only in the early stages of the team development but also in a later stage, subject to the recognition that social ties may fade away and affect collaborative work.

The role of the client in distributed collaboration

So far, our discussion of distributed collaboration has mainly focused on the vendors and companies that adopted global teams approach as part of the captive mode of working (e.g. by carrying out global projects that involve team members from different sites of the same company). We claimed that vendors and other global companies should introduce and use cutting edge methodologies, practices, tools, and technologies to ensure that software solutions can be jointly developed by remote team members. In offshore outsourcing arrangement, however, the

client, who is on the receiving side, is part of this distributed collaboration and can, in fact, improve the degree of collaboration between the vendor's onsite and offshore teams. For example, the client can work with the vendor to ensure that there are no knowledge or expertise asymmetries between onsite and offshore teams. In such a case, the client can ask the vendor's offshore team to "play-back" the information the offshore team has acquired from the onsite team. However, such involvement is not always welcomed by clients, in particular if the client perceives the outsourcing contract as transactional in nature. Therefore, we would like to highlight two value propositions for the client that could improve the collaborative mode between the client, onsite and offshore teams, and could also improve the value delivered to the client from the outsourcing contract.

Proposition #1: Clients must understand the benefits they will receive from a vendor's collaborative system. In the pre-contract stage, clients need to obtain a detailed statement, in financial terms as far as possible, of the benefits to themselves of their provider's collaboration practices. These benefits could include a speedier improvement in service performance, faster availability of expertise at lower rates, and the provider's commitment to a higher level of innovation in processes, services, and technologies, resulting in observable performance improvements. Such benefits, though, must be agreed, documented, and signed off in the contract, with money or credits going to the client where they do not materialize.

Proposition #2: Clients must understand the costs of a provider's collaboration system. Generally, these costs involve helping the provider coordinate service delivery by making the client's and vendor's staff available for knowledge transfer activities, through methods such as seminars, interviews, and offshore visits. Clients should agree to these costs contractually. Clients should also understand and agree contractually to the net benefits they will receive versus the net benefits the provider will receive. As we have observed, when there is a large difference between the two, the disadvantaged party's commitment to delivering on the collaboration strategy falls off.

Summary

Offshore, nearshore, and onshore teams are nowadays part of globally distribute teams. For this reason, such teams should consider their mode

of operation to ensure successful collaborations. Previous chapters have focused on the key aspects in managing outsourcing relationships without analyzing the specific context within which such collaborations take place. This chapter has considered the unique challenges that such global teams face and the coping tactics and strategies available to improve the collaborative mode of remote counterparts.

CHAPTER 10

Emerging issues in sourcing strategy

Introduction

This chapter will discuss emerging business and technology-related trends in the field of sourcing. It will also consider how sourcing strategy can be used as a competitive differentiator and how firms can learn to innovate across geographical and organizational boundaries. We will focus on the following aspects:

- some of the most recent business and technology-related trends in global sourcing;
- whether strategic advantages can be achieved from introducing such business solutions;
- the strategies that captive centers could pursue;
- whether firms can produce innovative products and services through global sourcing.

Emerging sourcing concepts

In recent years, various new sourcing concepts have emerged. Among them are the notions of shared services, bundled services, software as a service (SaaS), and cloud computing.

Shared services

Shared services imply the consolidation of support functions (such as human resources, finance, procurement, and IT) from several departments into a standalone organizational entity whose objective is to provide services as efficiently and effectively as possible. When managed well, shared services can reduce costs, improve services, and even generate revenue. Creating successful IT shared services is listed as one of the seven habits of effective technology leaders (Andriole, 2007).

A shared service can take various forms of commercial structure such as *unitary*, *lead department*, or *joint initiatives*. Unitary refers to a single organization consolidating and centralizing a business service, while lead department is an organization consolidating and centralizing a business service to share with other organizations. Joint initiatives are set up by two or more organizations reaching an agreement to build and operate shared services. Similar to outsourcing arrangements, shared services can be run onshore, nearshore, or offshore.

Shared services allow companies to analyze the value of a service that is provided to internal customers, in order to change or optimize them. The end result should be increased flexibility in institutionalizing business changes, to improve the management of cost centers. Compared with outsourcing to a third party, shared services allow companies to retain greater control over provided services. However, some argue that the shared services model still faces the barrier of internal bureaucracy. It has been reported that achieving full benefits from shared services is not easy, because this often requires substantial programs of organizational changes (Lacity and Fox 2008).

Lacity and Fox propose that shared services require senior managers to manage four programs of change:

- business process re-design (BPR),[1]
- organizational re-design,
- sourcing re-design,
- technology enablement.

BPR involves the standardization of processes around best practices, cost reduction, and improvement of controls. Organizational re-design allocates staff according to the value of services they provide. Typically, standard services are moved to shared services facilities. Sourcing re-design determines which business processes to keep in-house and which ones to outsource to an external partner. Finally, enabling technologies are used to implement the above changes and to coordinate work internally across units and externally with sourcing partners.

Bundled services

Bundled services is a mix of business processes and/or IT services purchased separately or at the same time from the same supplier from which synergies

[1] Also referred to as Business Process Re-engineering

and efficiencies are sought in end-to-end processing, governance, relationship management, cost, and performance. Bundled services can help clients reduce transaction costs in a number of ways. They typically include:

- risk reduction;
- lower levels of governance;
- simpler contracting;
- ability to move to standardized practices;
- synergies across services and processes;
- less management time getting to contract;
- lower relationship management costs.

There are two types of bundled services: *price bundling* and *product bundling* (Harris and Blair, 2006). Price bundling refers to the sale of two or more products in a package at a discount, but the individual products are not integrated. Product bundling is the integration and sale of products at any price. Studies have shown that the propensity and capability of organizations to buy and manage bundled IT services is much higher than in the case of business process outsourcing and offshoring of IT services (Willcocks and Lacity, 2006).

Three dimensions are reported to affect the customer's propensity to bundle services: the *bundle*, the *consumer*, and the *supplier* (Agarwal et al. 2000). For the bundle dimension, there is the bundle choice, referring to newly formed combinations of products, and the bundle size, which is the number of products per bundle. In terms of the client, the following factors affect a client's propensity to buy bundled products: tendency for single sourcing, the extent of the use, the number of products currently used, and certain client-specific characteristics. With regard to the supplier, the key factors are the perceived quality of the service and the lock-in position of the supplier. Table 10.1 explains these dimensions as situated in the outsourcing context.

One critical element in achieving successful bundled services is to demonstrate that the client benefits from the synergies between the various services provided by the vendor. Our research shows that most clients have not developed capabilities to evaluate their vendors of bundled services based on the synergies achieved.

Cloud computing

Cloud computing provides common business applications online that are accessed from a web browser, while the software and data are stored on

Table 10.1 Factors affecting firms' propensity to buy bundled services

	Factors affecting propensity to buy bundle services	Dimensions	Relevance for the outsourcing context
Bundle	Bundle choice	New or perceived new services	Clients might be more inclined to consider bundled services if they are perceived as new services (higher value proposition). Needs to be considered from early adopter's viewpoint. Who are the early adopters in this industry?
	Joint functional compatibility	Risk associated with the performance of bundled services	Buyers might tend to add services to the package if they think the bundling will not harm additional services but will present cost advantages that non-bundled services offer.
	Bundle size	Number of products per bundle	Flexibility in bundle size may increase propensity of small firms but might have a negative effect on the supplier's cost structure.
Client	Single sourcing tendency	Tendency to purchase from single supplier	Clients with limited resources or weak learning capabilities will tend to contract with single source.
	Extent of usage	Heavy consumers of outsourcing versus light consumers of outsourcing	Clients for whom a large portion of their expenditure is on outsourcing will be more inclined to buy bundled services (sensitivity to discount on high value activity).
	Number of products currently used	High number of services in use	The more the client is familiar with the product, the more likely it is that the client will buy the bundled service.
	Firm characteristics	Size, performance	Large well-performing firms will tend to buy bundled services. High spenders on IT services will tend to consider bundled services.
Supplier	Perceived supplier quality	The perceived quality across the various services bundled	Propensity to buy experienced services if quality is high, or services that the perceived quality is high.
	Lock-in position	The dependency between the various services	Propensity to buy or renew bundled services will increase when the dependency between the services is high (regardless of whether if performance is enhanced by buying bundled services).

the servers. It describes a system where users can connect to a vast network of computing resources, data, and servers that reside somewhere "out there," usually on the Internet, rather than on a local machine or a local area network or in a data center. The metaphor of the *cloud* draws on how the Internet is depicted in computer network diagrams and represents an abstraction of the complex infrastructure it conceals. In other words, cloud computing allows users to access technology-enabled services on the Internet without having to know or understand the technology infrastructure that supports them. Nor do they have much control over it.

The key benefit of cloud computing is that it provides on-demand access to supercomputer-level power, even from a thin client or mobile device such as a smart phone or laptop. Enabling "massively scalable" services is what characterizes cloud computing. For example, every time someone logs into Facebook, or searches for flights online, they are taking advantage of cloud computing. They will be connecting to large volumes of data stored in remote clusters or networks of computers. Google is another example of cloud computing. For a company, using cloud computing means it does not have to own any server. They only need to have key application software on their terminals, and pay a certain amount of service charge for a host company to provide storage and processing capacity.

The downside of cloud computing is that companies have limited control over their basic IT services and databases. They may suffer loss of access to their data when there is a problem in the cloud or with the physical infrastructure of the cloud. Privacy and confidentiality issues have also increasingly become a concern, especially when clients use service providers in a different country, where the local law may allow the government of that country to access certain data stored on hosted servers.

Software as a Service

Software as a Service (SaaS) is a model of software deployment where an application is hosted as a service provided to customers across the Internet (i.e. Web-based application). Essentially, this application service model is based on the principles of cloud computing but takes a commercial form. The SaaS provides access to and management of an application that is commercially available (SIIA 2000). It is a model which deploys the application, or service, from a centralized data center across a network, and provides access and use on a recurring fee basis. The distinction between SaaS and earlier applications delivered over the Internet (as part of the Application Service Provision (ASP) model that was popular in late 1990s

and early 2000s) is that SaaS solutions have been developed specifically to leverage Web technologies such as the browser, thereby making them Web-native. Furthermore, SaaS is distinct from a traditional server/client approach due to its significant potential for economies of scale in its deployment, management, support, and through the software development lifecycle.

Many types of software are well-suited to the SaaS model, where customers may have little interest or capability in software deployment, but do have substantial computing needs. The SaaS model can be applied within different segments of the market (SIIA 2000). At the higher end of the market, providers may offer applications such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Supply Chain Management (SCM), E-Commerce, etc., as well as selective industry-specific solutions. Low-end applications include solutions for small and medium enterprises. Applications offered at this level can usually be easily configured by the users.

Emerging offshoring captive strategies

Apart from emerging technological platforms that provide a great range of alternative solutions to the traditional outsourcing approach, there are also emerging alternatives in sourcing strategies. Captive centers are one example. *Captive centers* refer to overseas subsidiaries set up by global corporations to serve the parent company, instead of contracting out jobs to an offshore provider.

Choosing between captive centers and third-party vendors

It has been suggested that the decision between outsourcing business and IT activities to a third-party vendor or a captive center depends on the operational and structural risks associated with specific business and IT activities and other factors discussed in Chapter 2. However there are additional external factors that need to be considered when making decisions concerning the adoption of a captive mode of working. In particular, Levina (2006) suggests that in countries where large vendors are in high demand, clients are not likely to get the kind of attention and priority that they have grown accustomed to when using their own captive unit. For example, if a financial services firm decides to offshore some of its IP- or data security-sensitive applications, a carefully managed outsourcing contract may be

preferable to captive centers, especially in locations where a high level of IP and data protection is offered. This is because large established vendors are probably more careful about protecting their reputation than individual employees in a captive center. Prosecuting an individual employee in an offshore country may not yield much compensation for the damage (Levina, 2006).

After talking to over 60 representatives of client firms in the US and IT services vendor firms and captive units in India and several countries in Eastern Europe, Levina (2006) suggested that two criteria are critical in making the sourcing choice:

1. Whether, at the time of the decision, third-party vendors of a particular service have the human and operational capabilities as well as the scale and scope to match a client's long-term needs.
2. Whether the client perceives a value-creation opportunity in building an offshore capability that could potentially be sold off for a profit.

Moreover, Levina (2006) suggests that as long as offshore economics keep growing at fast rates, the captive versus third-party decision is more likely to depend on availability of vendor services, and the ability to train and retain qualified human resources and to coordinate work.

However, we argue that the sourcing choice is not limited to third-party versus in-house or captive mode but rather presents some additional possibilities. We discuss these strategies in detail in the following section.

Strategies to manage captive centers

Oshri, Kotlarsky and Liew (2008) found that 153 out of 250 of the largest global companies had had captive centers around the globe. Of these companies, 30% had changed their strategy for managing their captive centers in the previous six years. Four approaches were identified by Oshri, Kotlarsky, and Liew as deviations from the basic captive center approach: *hybrid captive*, *shared captive*, *divested captive,* and the *terminated captive*.

The *hybrid captive* is one that continues to perform core business processes for the parent company, but outsources non-core work, such as human resources, to a vendor in the offshore location. This approach allows the captive centers to invest more time and money in higher-profile work as well as to cut costs. On the other hand, it also requires the captive centers to develop management skills to manage relationships with vendors.

The *shared captive* center performs work for both its parent company and external customers. It is used by companies seeking to expand their business from the offshore location. This model enables the captive centers to become more efficient and valuable, as it takes advantage of existing offshore assets for multiple projects. On the other hand, captive centers often do not have a cost advantage over local vendors, and therefore need to look for clients internationally and not just in the offshore location.

The *divested captive* is an opportunity to exit an investment made in a captive center, usually to strengthen a firm's balance sheet or raise capital to invest in the business. The captive centers that stand the best chance of being sold for a profit are those that have pursued a shared strategy first. They will have the scale and scope to attract potential buyers; in particular, local vendors seeking to grow and enter new markets.

The *terminated captive* option is typically adopted when sub-standard service is damaging the parent company's reputation. Losses can be minimized by outsourcing less critical parts of the business to vendors in the offshore location and moving critical components back onshore.

Oshri et al. (2008) suggest that companies should make the decision about captive strategies based on whether they are pursuing growth or cost cutting via offshoring, and whether the offshore market is developed, as shown in Table 10.2. If the local market is developed, for cost saving

Table 10.2 Strategic captive options: Strategic intent and local conditions

Strategic Intent	Local Conditions: Underdeveloped	Local Conditions: Developed
Growth	1. Do not invest/ terminate 2. Focus on international markets	1. Switch to Shared Captive 2. Focus on local and international markets
Cost	1. Basic Captive 2. Consider Hybrid Captive with local vendors	1. Switch to Shared Captive 2. Increase scale and seek divestment/ growth opportunities

Entry point: Basic Captive

purposes they can increase a captive center's scale and divest the business for profit. To achieve growth, they should seek out international clients and invest to improve operations. If the local market is underdeveloped, a hybrid strategy may be the best option and the captive center should only be used for the parent company's needs.

Innovation through sourcing

There are many reasons why companies of various sizes see the benefit of outsourcing particular aspects of innovation. Quinn (2000) listed reasons which include limited resources and capabilities within the organization, shortage of specialist talents, management of multiple risks, attracting talents in the company's non-specialized areas, and getting to market at a faster speed.

So how can companies innovate through all the various ways of sourcing? Very often companies have an ad hoc approach to innovation, or what Linder and associates (2003) call a "transactional approach." Such an approach often fails to leverage organizational learning and may also result in the unintended loss of knowledge. An ad hoc approach is not able to create a culture in which external contributions are accepted or welcomed. Moreover, it is very difficult to measure innovative processes and outcomes when companies innovate on an ad hoc basis.

Organizing for innovation

Before looking to the market for innovations, companies should first consider whether innovating through sourcing is the best strategy. As Chesbrough and Teece (1996) point out, the virtues of virtuous have sometimes been oversold. Companies that place much emphasis on external sourcing while neglecting to nurture and guard their own capabilities may be taking many risks.

Chesbrough and Teece (1996) distinguish two types of innovation: *autonomous* and *systemic*. Autonomous innovation can be pursued independently from other innovations, while the benefit of systemic innovation can be realized only in conjunction with related, complementary innovations. The two types of innovation call for different organizational strategies. Autonomous innovation can be very well managed in decentralized virtual networks, while systemic innovation requires a high level of information sharing and the capabilities to coordinate adjustments throughout

an entire product system. Such capabilities of coordination and integration are usually available within a well-managed organization rather than a loosely connected network.

The case of IBM is a good example. In the early 1980s, IBM had an "open" architecture which was based on standards and components that were widely available. This open architecture enabled IBM to take advantage of third-party development of software applications and hardware accessory products. It also relied on the market to distribute the product. As a result IBM greatly reduced the costs to bring a PC to market and outperformed Apple, which was the market pioneer at that time. However, with time IBM has lost its advantage in the market as other competitors have tapped into the same sources in the market, over which IBM has little control. Moreover, most of the profits from the PC architecture have migrated upstream to the supplier of the microprocessor (Intel) and the operation system (Microsoft).

The experience of IBM shows that key development activities that depend on one another must be conducted in-house to capture the rewards from long term R&D investments. By cultivating and strengthening a company's unique competencies and capabilities, they are also able to maintain the position of being a dominant player in a network, and thus to drive and coordinate systemic innovation. As Chesbrough and Teece (1996) observe, the most successful companies withhold dominant control in a network. For example, Toyota was much larger than its suppliers and was the largest customer of most of them. As a result, it could compel those suppliers to make radical changes in their business practices.

Tapping into innovation sources

Once companies make the decision to leverage externally sourced innovation, they should establish deliberate, consistently available channels which match their strategic requirements (Linder et al. 2003). Once established, these channels can be used fluidly as needs arise. Linder and associates (2003) identify five types of external innovation channels:

1. *Building innovation on the market.* One source of innovation on the market is organizations such as universities and private research labs which offer innovation for sale. This type of channel is well-established across industries. Another way to tap into innovation on the market

is through "strategic procurement," that is, by seeking differentiated products or innovative processes from suppliers.

2. *Investing in innovators* is when companies take equity positions in organizations focused on small or emerging markets. This often helps to resolve the "innovator's dilemma"; that is, when established firms resist innovation that might undermine their existing offerings. By investing in an equity partnership, a company can participate in and nurture an emerging market.
3. *Co-sourcing.* Companies sometimes band together to share the costs of innovation, for example, to address regulatory requirements that affect them all. Some high tech firms sponsor professors in universities who work in promising areas, and share any intellectual property that is produced. Finally, joint venture is also used as a way of co-sourcing innovation.
4. *Community sourcing* refers to innovation produced by loosely connected communities of sophisticated users. One successful example is the open source software industry. Another example is eBay, which uses community-based innovation extensively to identify new sales categories and expand the capabilities it offers customers.
5. *Resourcing* is a way for companies to support their research staff by contracting with external suppliers for on-demand talent and innovative new tools. For example, DuPont Crop Protection hires high-quality researchers in India, Russia, and China who are paid at a much lower level than those in the US. Aventis S.A. identifies leading, cutting-edge technologies in the market and brings them in-house to support product development.

Managing outsourced innovation

Given that the market is changing fast, companies learn from each wave of innovation, and develop a genuine scanning capability for future opportunities. Quinn (2000) discusses several key aspects to preparing and managing successful outsourced innovation.

Commit to exciting goals. Shared commitment to common goals inspires internal and external people to work together with energy. Innovation is more likely to happen when people from both the buyer and the vendor enthusiastically support and benefit from innovation. It is important to have common interests, shared objectives, and mutually agreed targets.

Make sure your partners benefit from the partnership. While companies should focus on their core capabilities to achieve best-in-world performance, outsourcing their non-core areas of activity to suppliers provides an opportunity for the vendor to innovate and build upon their best-in-world expertise.

Create internal masters of the process, who can help find and develop the most talented outsourcing partners. Process masters are usually inquisitive and gregarious people with excellent specialist skills. They identify, benchmark, and track best-in-class capabilities for the company's processes, both internally and externally. These people are able to bring innovative concepts into the organization and help stimulate and facilitate the adoption of new solutions.

Develop open, interactive software models. These software models provide a constantly updated, accessible, visual, and multi-dimensional view, both of the system to which any innovation must adhere and of the performance that the innovation must surpass. These models also provide software hooks and define interfaces that enable external designers to innovate independently. As a result, participants in different time-zones or work cycles can perform precisely and asynchronously, thereby increasing the speed and precision of innovation processes.

Establish figures of merit. Figures of merit, namely exciting performance targets, would induce innovators to rethink existing approaches and come up with something genuinely new. Studies show that virtually all the top innovative companies (including Sony, Hewlett-Packard, Intel, Motorola, DuPont, and Vanguard Securities) have utilized figures of merit. Company leaders would project known trend performance in the industry and set 30%–500% higher performance targets. Figures of merit can provide the focus, cohesion, and energizing goals needed for delegating to small, flexible, decentralized, self-coordinating internal or external innovation groups.

Concentrate on what needs to be accomplished, not on how to get there. Imposing detailed control of processes will constrain the innovators. Buyers should understand that true innovations are not linear but complex and chaotic, often entailing spurts, frustrations, and sudden insights. Instead, buyers should closely engage with the innovators through continuous interactive tests and feedback, and make sure that the innovative partner understands the customer's needs. Moreover, it is advisable to keep a number of innovative outsource partners participating and competing with each other for as long as possible.

Use software to coordinate the players. Software provides a common language, a measurement system, and a set of rules which facilitate human communications, and capture and preserve knowledge that is precise, detailed, and easily transferable. With sophisticated electronic modeling and visual presentations, companies are able to perform joint reviews with their outsourcers. Such capabilities enable collaboration to move beyond co-located teams. Collaboration can take place among geographically distributed and independent entities. These entities may not work under the command of a single authority.

Share gains from surpassing targets. It is important that both parties agree on specific performance targets that are fair, few in number, easy to understand, and readily usable by the people doing the work. Sometimes the outcomes of innovation are well beyond initial targets. Under such circumstances, it is unrealistic to expect that suppliers pass all gains from innovations to the buyer. Instead, buyers should use value pricing and share gains with the innovators to sustain jointly shared innovation incentives.

Implement a three-point system of information exchange and project execution. A three-point system consists of three contact points: top-level managers to oversee the innovation relationship, middle-level managers who are champions on both sides, and people who actually develop and produce new inventions. Interactions at these contact points help ensure that the valuable nuances of tacit knowledge about problems and processes get transferred when needed – and that the best vendor talent and sufficient urgency are applied to the project.

Set up incentive systems and provide open, compatible information. At the heart of successful innovation is a common, open-information capability that places all participants on the same footing in discussions. In general, companies that are successful at innovating have porous organizations developed around the three contact points. Such arrangements enable maximum information exchange. A flat organizational structure also reduces the inefficiencies arising from endless approvals and from communications delays. It also provides individuals with higher levels of responsibility and flexibility.

Summary

This chapter discussed various emerging business solutions and strategies that we believe will affect the outsourcing landscape in the coming years.

Of particular interest is the dynamics in the strategies pursued by captive centers in India and China. The other emerging topics, in particular the various business solutions are taking shape and will very likely have an impact, though not necessarily in their current form, on the outsourcing field and business world.

Relevant teaching case

Oshri, I. (2009), "*Strategic challenges facing captive centers*," available in this book.

CASE STUDY 1

Managing IT outsourcing and core capabilities for business change: The Commonwealth Bank of Australia case

Peter Reynolds and Leslie P. Willcocks

Synopsys

This teaching case provides a practical illustration of the challenges of using IT outsourcing and evolving the IT function's structure, governance arrangements, and capabilities in a dynamic business context. A central focus is on retained core IT capabilities at Commonwealth Bank of Australia (CBA) in the 1997–2006 period, needed to gain business value from IT and IT suppliers. It foregrounds two persistent issues in IT management. First, what are the IT capabilities that must be retained within an organization? Second, what are the mechanisms for developing, nurturing, maintaining, and evolving these capabilities? The teaching case shows the dynamic and evolutionary nature of this process.

The case also allows students to explore several other key IT management issues. The strengths and limitations of large-scale IT outsourcing are examined, and how CBA dealt with these, and evolved toward a multisourcing strategy. How the IT function needed to change its structure and governance to align with dynamic business context and strategy is detailed. The case also deals with the roles of the CEO, CIO, and business managers in leveraging IT performance for business value, the building of project and program management capabilities, and how to organize IT to support a business transformation program. Finally, the case provides information to

enable students to review the case and invent the future for CBA on these many issues.

Background – Commonwealth Bank of Australia

The CBA was established in 1911 and, until 1959, also served as the country's Reserve Bank. The Bank completed its privatization process in 1996. The background to this case is a period of business changes that saw a merger, several changes in organizational structure and numbers of business units, and two business transformations strategies launched (2001, and a large one in 2003). Throughout most of the period, until he retired in 2005, the CEO was David Murray, an accountant by training. By 1996, he and many Board members had become skeptical about internal IT performance and began supporting outsourcing as a major solution. They sought improvements in IT cost control, performance, and innovation. However, as a business, CBA was relatively successful and this continued right through to 2007. By then it provided a full range of banking services to retail, commercial, corporate, and institutional clients. It had over nine million customers and more than 35,000 full-time equivalent staff. In 2007, the bank operated the largest financial services distribution network in Australia serviced by more than 1000 branches, 3800 agencies, 3200 ATMs, more than 135,000 EFTPOS terminals, and Internet banking services to more than 2.5 million customers. In 2006, it was rated in the top 25 banks in the world of capitalization.[1]

Phase 1: Large-scale single supplier IT outsourcing 1997–2000

On October 10, 1997, CBA entered into a 10-year Aus$ 5 billion single-source joint venture deal with EDS for all IT services, the largest financial service outsourcing deal in the world for its time. To secure the strategic nature of the outsourcing relationship, CBA purchased a third share in EDS Australia's equity holdings. EDS had been eager to get a prestigious client based in Sydney, its only other major Australian client at the time being South Australia Government. It had agreed to slim profit margins, believing that money could be made on additional services CBA would need during the course of a ten-year contract. CBA's newly established internal IT

[1] Commonwealth Bank Australia Annual Reports 1997–2006. All figures for 2006.

function, Group Technology (GT), was led by Howard Morris, an IT professional, former IBM service manager, and CIO of the Australian Stock Exchange (ASX). He reported to the head of Technology, Operations, and Procurement (TOP) – initially John Mulchay, the architect of the IT outsourcing deal, and later Russell Scrimshaw. In the CBA IT operating model (see Figure CS 1.4 for 1997–2000) TOP acted as a shared service provider to its host business unit – Retail Banking – to other business units – Institutional Banking and International Financial Services, and the later acquired Colonial First State Investment Group.

Of the team of 35 people, approximately half were retained from the internal function including the heads of Service Delivery, Transition Management, and Relationship Management. The other direct reports of the CIO were new, including the Financial Manager, Contract Manager, Technology Strategy Manager, and Value-Add Manager (see Figure CS 1.4). This process introduced new experience and capabilities into CBA. For example, the Finance Manager brought audit experience from a major accounting firm.

The initial focus of GT was on managing the two-year transition to the new service provider's processes. This focus was closely followed by ensuring the requirements were met for Year 2000 (Y2K) and the introduction of the country's Goods and Services Tax (GST) in July 2000. By early 2000, good progress had been made on the outsourcing objectives of controlling costs and improving IT service levels. CBA declared transition successful and that IT outsourcing was providing dividends. CBA achieved its objectives in relation to IT cost reduction, reduced as a proportion of non-interest expense from 16.3% in 1998 to 15.5%.[2] Total service outages were reduced by over a third and the critical "Severity 1 errors" reduced by a factor more than double this.

By mid-2000, however, the internal IT staff had dwindled – almost half of the internal staff had left or retired, including the CIO. At the same time, the business was undergoing significant changes following the Aus$ 10 billion[3] merger with Colonial Bank. There was also internal restructuring around customer segments (Figure CS 1.4) and the first steps to multisourcing with the selection of a specialized telecommunications partner – NZ Telecom – in addition to EDS.

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[2] Source: Russell Scrimshaw, CBA Head of Technology, Operations & Procurement, "Strategic Considerations for IT outsourcing," Salomon Smith Barney, The 2002 Australian Banking Conference, March 6, 2002.

[3] Aus $ 1.00 is approximately US$ 0.80.

Phase 2: The move to a core capabilities model: 2001

In June 2000, Bob McKinnon was appointed as the Group CIO. A business executive, he was formerly CEO of State Street's Australian operation and had a finance background including CFO of Mutual Life Corporation (MLC)/ Lend Lease. As the new Group CIO, he was faced with major challenges including:

- integration of CBA and Colonial IT;
- realignment of the Bank's IT strategy to its new business mix (see Figure CS 1.4);
- transitioning from a single supplier to two suppliers for IT and telecommunications;
- extracting "value-added" services[4] from the suppliers;
- maintaining service levels and reducing costs.

McKinnon conducted an initial set of discussions with the business to understand their business and IT challenges. It was clear that despite the cost and service improvements there were significant relationship pressures between the business units, IT function, and vendors. In addition, there was also tension within these groups. There was poor coordination between business units of their IT needs, resulting in a loss of scale and integration. There was lack of IT governance across the central IT team. Moreover, new business unit IT functions had evolved or were acquired through the merger. Finally, there was tension between the vendors, with boundary and demarcation disputes. The benefits of the IT outsourcing, and of IT to the business, were under threat. As described by CBA service delivery manager:

> *"Being distracted by Y2K and other bank integrations, we basically had no capability to manage service performance or the performance of the service providers, in terms of their obligations, as we had established them."*

Recognizing the need to strengthen Group Technology, McKinnon looked for best practice models for managing large-scale IT outsourcing deals. This led to a conscious adoption of a core IT capabilities model which suggested nine core IT capabilities needed to be retained (Table CS 1.1).

[4] "Value-added" services refer to partnering opportunities presented by the supplier working with the Bank. These included joint go-to-market strategies and leveraging suppliers' Intellectual Property.

Table CS 1.1 Core IT capabilities model adopted by CBA

Capability	Description
Leadership	Integrates the IT effort with business purpose and activity
Informed buying	Manages the IT sourcing strategy to meet the needs of the business
Business systems thinking	Ensures that IT capabilities are envisioned in every business process
Relationship building	Gets the business constructively engaged in operational IT issues
Contract facilitation	Ensures the success of existing contracts for external IT services
Architecture planning and design	Creates the coherent blueprint for a technical platform that responds to present and future needs
Vendor development	Identifies the potential added value from IT service suppliers
Contract monitoring	Protects the business's contractual position present and future
Making technology work	Rapidly trouble-shoots problems which are being disowned by others across the technical supply chain

An initial assessment against the model in July 2001 showed that the strongest internal IT capabilities sat within the Contract Management function. The relationship was being driven from a contractual standpoint without the necessary Contract Facilitation or Informed Buying capabilities. This was damaging any Vendor Development capability. Whilst a relationship management team was in place to build the relationship between GT and the business, their focus was being dragged into contractual disputes, creating a void in Relationship Building and Business Systems Thinking. The limited number of retained staff who understood the complexity of the existing systems, combined with the small number of technical architects, left the bank with a deficit of Making Technology Work and Architecture Planning capabilities. Leadership, however, was seen as strong, with a new sense of drive and urgency driving the need to re-build the Bank's internal capabilities.

The Bank also had pockets of project delivery capability (which had mixed success) that also had to interface with EDS in later integration phases of projects. There were no formal engagement or management protocols to get predictable (or at least positive) delivery results.

In September 2001, the core capabilities model was used as the basis for McKinnon's first restructure of Group Technology. This new structure introduced a stronger Architecture function to support an enterprise-wide approach across the group business units and balance the Contract Monitoring and Vendor Development capabilities. The team was organized around two main functional groups, Architecture Planning and Service Delivery, with smaller functional groups for Value Management (corresponding to Informed Buying and Vendor Development), and Finance and

Program Management (support functions for the CIO). Business Systems Thinking capability was seen as being needed to be built within the business units (see Figure CS 1.1).

Recognizing that a high performance IT function results from specific individuals placed in roles as well as their ability to work together as a team, Bob McKinnon espoused the characteristics required for a high performance team. This included, being a small team of high caliber people, a center of IT excellence and leadership and attracting and retaining the right people. This was set out to be achieved through:

- an open, flexible workplace;
- challenging career opportunities;
- a focus on personal development;
- competitive (above median) remuneration;
- clear roles, responsibilities, and accountabilities;
- good people attracting good people.

To lead the two major functional groups, the former CIO of Colonial was appointed into the Service Delivery group. Although it was recognized that he would not take on this role permanently, this provided sufficient time to find his replacement, who was appointed in October 2001 from a major telecommunications company and with banking experience. The existing head of Technology Management was appointed CTO (Acting) and later confirmed in the role and the existing head of Transition was made responsible for "Value-add", including Vendor Development. New resources were brought in to run Finance and Program Management.

Defining roles and responsibilities

In addition to the right people, CBA recognized the need to formally define their roles and responsibilities. Toward the end of 2001, new roles and responsibilities across GT were defined. IT governance and leadership skills were seen to be required by all managers. Business Systems Thinking remained as a function that was seen to be the primary responsibility of the business units, liaising with the Architecture Planning and Relationship Management teams. The resulting structure is shown in Figure CS 1.1.

Phase 3a: Building core IT capabilities – 2002–2003

With McKinnon's new structure in place and the introduction of service delivery, informed buying, and architectural planning, the focus moved

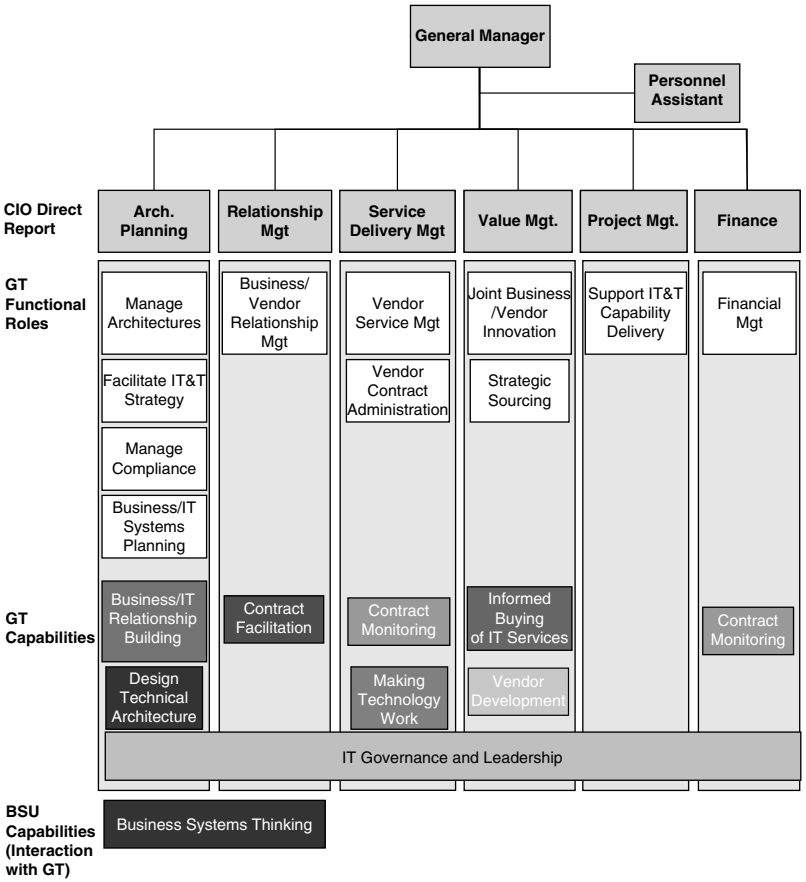

Figure CS 1.1 New structure and responsibilities mapped against core capabilities – 2001

Source: Analyst presentation, Russell Scrimshaw/Bob McKinnon, "Commonwealth Bank Group Technology Strategy: Enabling Growth and Productivity" June 2001

next to strengthening each capability within Group Technology, as well as developing a longer-term strategy for managing IT across the group.

Service delivery

The new head of Service Delivery, appointed in November 2001, implemented a two-step process of building internal capability. The first step was around operational service performance – day-to-day certainty of service performance. He quickly recognized the need to work with the

service provider every day to have oversight and input to fundamental IT Management areas:

> *"So our focus was on operations. I employed three or four really capable and experienced operations management "thugs" and I put them on-site with the service provider on the basis that if I was going to be accountable for the outcome in some way, I needed to have some oversight of the input, but do that in a way that did not compromise the service provider" – Jim Stabback.*

Step two was more commercially focused on three areas: creating a capability to understand what CBA was buying, putting in processes to ensure that the bank was getting the services as prescribed by the contract and assessing value for money for new services**.** The sort of people recruited into these roles had a depth of commercial and technology experience that allowed them to understand some of the behavioral implications of the commercial contracts put in place. A "tower manager" was appointed to manage each service delivery area, such as central processing, telecommunications, and desktop services. These managers provided an internal capability to understand the long-term design implications of what was being done, the commercial consequences of the technologies that were being deployed, and to run benchmarking to give an understanding of value.

A new direct report to the CIO was appointed, an ex-partner from a Top Five consultancy firm, to head Relationship Management and build Demand Management capability. This role was internally focused, working with the business units to help them articulate what they wanted, understand what else was being done, and how to get best business value from IT

> *"So before I took over, no-one actually managed the demand and looking for consolidation, prioritization, efficiency, all those type of things. It was all about an order-taking point of* view*... I had to change what they were doing, I had to take them up the food chain to be genuinely relationship managing, rather than just being the person you call when you want a new PC; the need was to take an holistic view"* – David Curran.

Architecture planning

The Head of Architecture Planning/CTO built his team up to around a dozen people mostly from external recruits, including a chief architect

recruited from a competitor Bank who later took on the CTO role. An exception was the head of IT Security, who was recruited from the internal audit team. The team was organized into Enterprise Architecture, Business Systems Planning, and Security.

The focus remained around facilitating of the IT Strategic plan in alignment with the business strategy. During each of the Bank's business planning cycles, an extensive alignment process was conducted with all business units to coordinate proposed IT investments, remove duplication, and fund IT infrastructure. Monthly updates were provided to the ETC, highlighting progress and individual project contribution to the future IT&T blueprint. A set of policies and standards were defined in support of the IT&T Blueprint. Over time, the IT Governance role was moved from Architecture Planning group to a new group under an "Office of the CIO" incorporating the Finance and Project Management functions as well as responsibility for the further development of the IT management model.

A Technology Risk Assessment (TRA) process was put in place to assess the technology risk of new projects in business terms. The business sponsor and divisional operational risk coordinator signed these off. Items affecting multiple business units also required Group CIO sign-off.

Extracting "value-add"

The value-add and strategic sourcing functions had been repositioned under the Head of Service Delivery. By August 2003, a project plan for the implementation of the sourcing strategy had been approved by the ETC and was in development to provide a systematic plan of action of what IT&T services to buy, how these services were to be bought, and who they were to be purchased from. However, capabilities in this area were gradually absorbed into developing the new sourcing strategy. In this process "value-added" opportunities were essentially forgone as the priority fell on developing a new contract with improved incentives and alignment to bank goals. At this stage, relationships with the suppliers were running into problems over their performance and a multi-sourcing strategy was being talked about for when the outsourcing contracts came up for renewal in 2005/2006.

Project management

The new role of Head of Project Management was filled by an external resource with strong project management background and training,

including a PhD related to project management. He recognized that the Bank relied on the supplier for much of its project delivery resources and management, with only a supra-level supervision from the bank. The supplier had access to many delivery methodologies – most too complicated for the bank's needs. A program – ZIP – was set up as an "across Bank-EDS engagement process for projects."

> *"By engaging all interested parties it had the advantage that the bank and its suppliers had a common framework to run projects with a good governance, high predictability to get better repeatable and consistent results with a lower degree of risk of failure"* – Head of Project Management.

However, while the need for project management capability in the Group IT function had been addressed, this was to prove inadequate in the light of only patchy project management capability spread through the businesses, and the CEO's late 2003 announcement of business transformation initiatives highly dependent on IT for their success.

Phase 3b: Extending capabilities for managing IT across the group – 2003

While building Group Technology internal IT capabilities to perform its accountabilities of managing the outsourcing contracts and maintaining control of IT strategy, McKinnon recognized that Group Technology had to play a stronger role across the group. Business units had started to establish IT functions, inherited from the Colonial merger or grown via subsidiaries, or simply filling capability gaps.

A first action was to establish a monthly Executive Technology Committee (ETC), chaired by the CEO and attended by each group executive and the CIO. The ETC role was to agree IT&T strategy, track progress, and resolve cross-organization strategic IT&T issues. One of the first agreements of the ETC was a set of IT principles that provided guidelines for the way IT should be managed in the CBA (Figure CS 1.2). The ETC was supported by two other committees: the IT Architecture Group (ITAG) and the Systems and Service Delivery Group (SSDG).

Three strategies

Under the sponsorship of the ETC, three cornerstone strategies were developed to address the capabilities required by CBA to enable its corporate

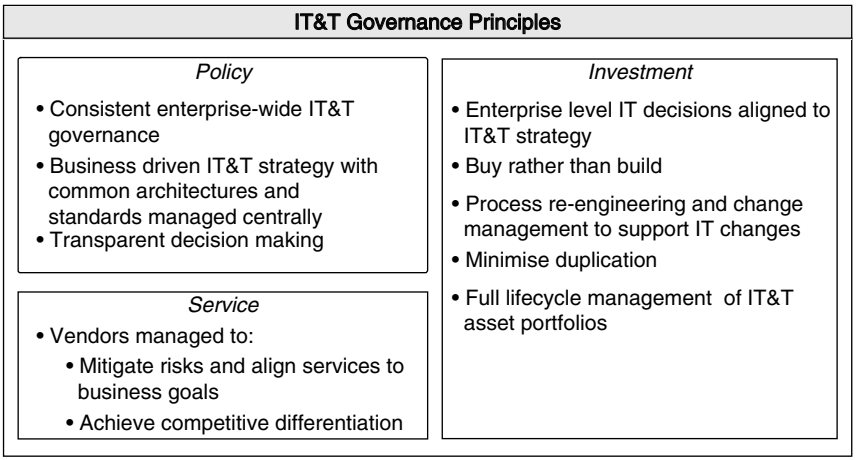

Figure CS 1.2 Group-wide IT&T Principles Critical to focus change

business strategy. Each of the strategies was oriented around specific competencies. The IT&T Strategy was facilitated across the business heads to develop a consistent view of customer requirements in three to five years and define an IT&T Blueprint to work toward. The IT&T Blueprint formed the basis for enterprise architecture and governance across the group with supporting policies, processes, and standards guiding IT&T decision making across the bank.

The IT&T Sourcing Strategy integrated much learning from the first three years of managing the IT&T agreements including:

1. Not only did accountability have to be retained for certain functions, but capabilities needed to be retained for managing and executing responsibilities related to these functions.
2. Do not stretch vendors beyond their competency. In an environment of trying to maintain a single point of accountability, often the existing vendor was being driven to do things outside their core competencies.
3. Vendor must be managed to deliver solutions that preserve the architectural integrity while optimizing for flexibility and cost.

A sourcing strategy was defined by early 2003, which included a staged plan of activities in preparation for 2005/2006 contract renewal.

The IT&T Management model provided a framework for decision making and managing IT&T across the Bank to achieve optimum value from its technology investments through clarifying the end-to-end roles and

accountabilities for the governance and management of technology and to introduce efficient and effective repeatable management practices. At the top level, the ETC (or its delegate as appropriate) was made responsible for decisions on Strategy, Architecture, and Policy as well as recommendations related to all service elements for Core Infrastructure. Group IT became responsible for decisions related to consolidated infrastructure vendor selection and delivery management. Business units were made responsible for consolidating their business systems functionality requirements, implementation planning, design, vendor selection, and delivery management.

A seat at the top table

Managing IT across the group from within one of the business units had its challenges. With an improved management of supplier, a clear business/ IT vision, and new governance processes to better control IT in the group, the value proposition of a stronger IT management function was clearer. Following the organizational restructuring in 2001 (see Figure CS 1.4), the CEO split Technology, Operations, and Procurement Division (TOP), moving Operations to the customer segment aligned business units and procurement into the central finance function. Group Technology remained as a new center function, renamed Technology Services (TS), with McKinnon reporting directly to the CEO. This was followed in mid-2003 by Bob McKinnon's appointment as part of the bank's Executive Committee (EXCO), which also dissolved the need for a separate Executive Technology Committee. The new structure reporting to McKinnon is shown in Figure CS 1.4.

Phase 4: A focus on delivery – 2004–2006

In September 2003, the CEO, David Murray, announced the Aus$ 1.48 billion "Which new Bank" (WnB) cultural transformation program focused on excelling in customer service through engaged people who are supported by simple processes (Figure CS 1.3).

A coordinated set of projects was assembled to achieve a positive return over three years, comprised of 50% cost savings and 50% revenue growth. The delivery of the business transformation required significant IT investment to accelerate the delivery of the IT&T blueprint, totaling over Aus$ 700 million. Under the IT management model, business systems (the bulk

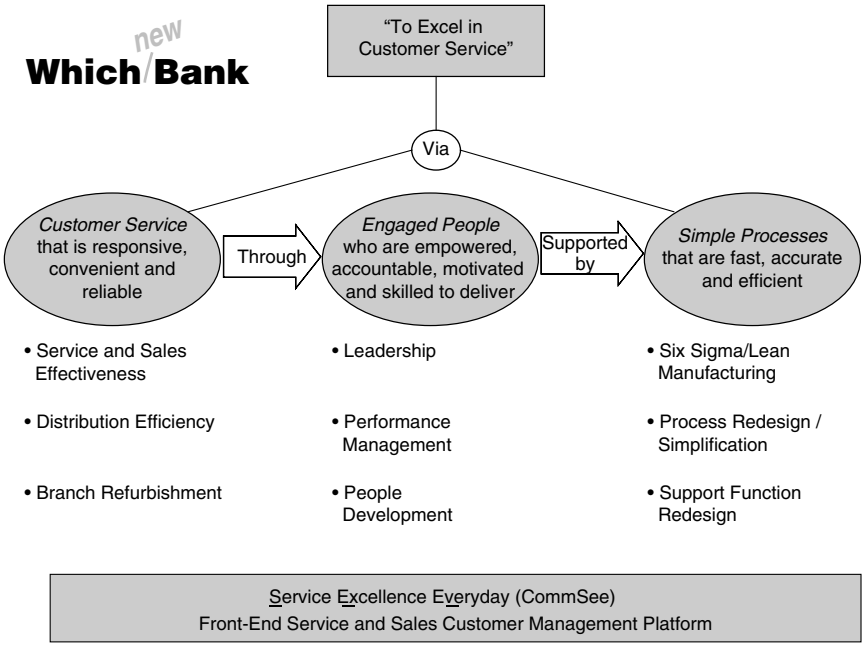

Figure CS 1.3 WNB transformation underpinned by new sales and service platform

Source: Adapted from Which new Bank update, CEO, 24 May 2005

of the investment) was to be implemented by the business units (in conjunction with the IT suppliers), whilst IT infrastructure was to be implemented by TS (also in conjunction with IT suppliers).

In support of such a major investment in IT, Technology Services was also required to contribute to the WnB cost-savings targets to achieve cost savings of Aus$ 80–Aus$ 100 million per annum by 2006. These would be achieved through efficiencies gained from the improved IT&T management model, improved IT demand management, and IT sourcing.

Coordinating Which new Bank projects – building program management capabilities

TS moved to strengthen its governance role around IT project delivery. This included IT portfolio, program, and project management. Portfolio management looked at all the asset classes of IT, trying not only to understand how collectively they add value to the organization but also to understand

the individual capability of those asset classes to contribute. The program office coordinated IT projects across the group to define appropriate project standards.

The definition of group-wide project management processes under the "Zip" project was rolled into the IT management model when the IT Project management function was rolled into the IT governance function.

> *"We created a project office in group technology… So we have to define end to end how any project with an IT&T component should be managed in the Bank and how that must interface with what we do from an enterprise perspective when it comes to project management"* – IT manager.

However, this struggled to get tract zens of projects scrambled to start as WnB took off.

At the same time, Technology Services had to build its own project management capability for delivering on its responsibility for all IT infrastructure projects across the bank (desktop services, telecommunications, etc.) and the common IT systems that now fell under the management of "Enterprise Services" in Technology Services. This included management of the Banks traditional infrastructure as well as shared information systems such as the core Customer repository or Customer Information Facility (CIF), and group data warehouse.

New delivery capability – CommSee

The cornerstone of the Which new Bank program was a new platform for front-end sales and service staff (Aus$ 250 million) to integrate customer details, contact records, leads and referrals, tracking of requests, and access to customer documents. It would provide the same results to all customer-facing staff in any location to enable staff to meet a customer's expectations to "know me," "give me what I want," and "do it reliably."

This project represented a significant technical challenge. Similar to most financial services organizations, the Bank's systems had evolved separately for different products, channels (e.g. branch, call center, and Internet), and business units. In addition, the project faced many management challenges. The development team was required to work across all business units to gather and agree requirements, adjust processes, decommission existing systems, and capture benefits. Accordingly, in addition to

the technology stakeholders, the project has numerous business stakeholders whose support was necessary for a successful outcome.

Faced with an ambitious timetable and a lengthy requirements gathering and product evaluation process, the CEO made the decision to leverage an existing internal system, renamed CommSee, developed by the innovative online stockbrocking subsidiary, and already used in the high-value client area of the Bank. This decision saved time spent evaluating alternative systems. It also reduced risk by using a system that was already integrated with the Bank's back-end systems, had a proven user interface, and was supported by an established high caliber internal team, capable of extending the system.

Perhaps not surprisingly, the other business unit managers and central IT group were concerned as to whether this team, its approach, and existing application, could be successful with large, mission-critical systems. Specifically, whether the novel approach could be applied to developing systems with many requirements, across multiple business units; and whether the team could operate in this new environment without negating its effectiveness. Further concerns were raised whether this platform could then be reasonably maintained and supported with the same level of supplier support and contractual backup as the arrangements with external suppliers.

Nevertheless, with the support of the CEO, the CommSee team set about rapidly demonstrating capability in a pilot in Tasmania by February 2004. The team rapidly grew from the initial 60 or so people in CommSec to form the core of what would later become an enterprise-wide development and delivery team.

Project governance was established within the IT management framework with an Executive Steering Group (ESG) that met weekly and was attended by most Group Executives[5] and their key staff. Critical design decisions, such as the scope of lending process reengineering and integration with the internet platform, NetBank, were agreed at the Executive Committee.

By mid-2004, the Bank's internal development staff had grown to approximately 500 IT staff, culminating in nearly 800 IT staff by the end of the project.

Creation of business unit CIOs

In May 2004, McKinnon made first moves toward centralizing all of IT to best support the implementation of the IT management model and IT

[5] A Group Executive reports to the CEO.

sourcing strategy. As part of the bank's overall push to reduce head-office support staff, McKinnon was given responsibility for redesigning the IT organization. This process resulted in the nomination of "business unit CIO" positions for the retail and premium business parts of business to report to the group CIO:

> *"We're actually decentralizing [the CIO role] from a physical point of view. These people sit with the business units, so they're an integral part of the business function, but they report to Bob as part of the IT group. And then we're, I guess, are serving a stronger central management role of infrastructure and the things that we should be able to leverage more effectively*" – Senior IT executive.

However, an argument was accepted based in part on the focus on WnB delivery and lack of capabilities to manage delivery in the group IT function, that the key delivery functions within IIS (merged from Colonial), and CommSee (built from CommSec) would remain reporting to the business unit Group Executives. This formed an uneasy truce around IT accountabilities between the business unit-owned internal delivery capability and the central IT-owned governance and management IT across the group.

Work continued on the sourcing strategy and the IT management model to identify a future model that would provide clarity on the extent of need for internal development capabilities and the appropriate IT organizational model. The NZT and EDS contracts ended for telecommunications (2005) and central processing (2006). Reliance on EDS for applications development services had continued to fall, with each significant project being delivered internally or tendered to the market. To gain momentum around sourcing, the head of service delivery, who managed the sourcing strategy, handed over all day-to-day service delivery responsibilities, and focused solely on the sourcing task. The resulting structure can be seen in Figure CS 1.4.

By January 2005, much progress had been made on the massive dual task of managing Aus$ 1.2 billion per annum IT expenditure and an additional Aus$ 700 million transformation spent on IT over two and a half years:

> *"The bank over the last year has had a level of availability of its systems that it's never enjoyed. In addition to that, the pricing of services has been driven down and the volume of usage has gone up. There are now 150 people doing service development, service management portfolio management, infrastructure management and delivery. ... If*

you line up [all of the priorities of the executive committee] with what's actually happening, you make this huge correlation between the priorities of the IT strategy of 18 months ago and what's actually happening" – business executive.

Phase 5: Unification

By August 2005, David Murray was able to announce that the WnB program was making significant progress. The net benefits in 2005 totaled Aus$724 million and were forecast on track to deliver total annual net benefits of at least Aus$ 900 million in 2006 and beyond to achieve the projected cost to income ratio targets.

"The continuing success of Which new Bank has allowed us to extract additional benefits above those originally anticipated. Over the past four months, CommSee, the Bank's new customer service system which allows us to have a single view of our customer, has been implemented for over 50 percent of customer facing staff" – David Murray.

A new CEO and CIO

With effect from September 22, 2005, David Murray retired and a new CEO, Ralph Norris, took over. Norris already had experience within the bank, as the former CIO and then CEO of the bank's New Zealand subsidiary Auckland Savings Bank. He was well regarded by market analysts, one commenting a year later:

"Norris has stuck to his broad priorities: customer service; business banking; technology and operational excellence; and trust and team spirit. These are the target areas he expects to be measured against" – Australian Financial Review, 10 August 2006.

Soon after the Norris appointment, McKinnon announced his departure with effect from November 28, 2005. A new CIO, Michael Harte, was announced on February 22, 2006, with a career as an IT professional, formerly CIO of PNC Financial services in the US. Michael Harte commenced his appointment in April 2006, and as with his predecessor, spent time meeting people across the technology team, his business peers, and service providers. He highlighted that the technology teams had a great

deal to be proud of and his belief that the Bank is one of a few financial services organizations globally that have seriously invested in technology and also proven their capability to deliver. However, it was clear that there was a significant gulf that split the central IT groups and divisional IT groups.

To integrate the teams, Norris announced a new business unit-led structure (see Figure CS 1.4) with all IT functions reporting to the central IT group, renamed, Enterprise Services.

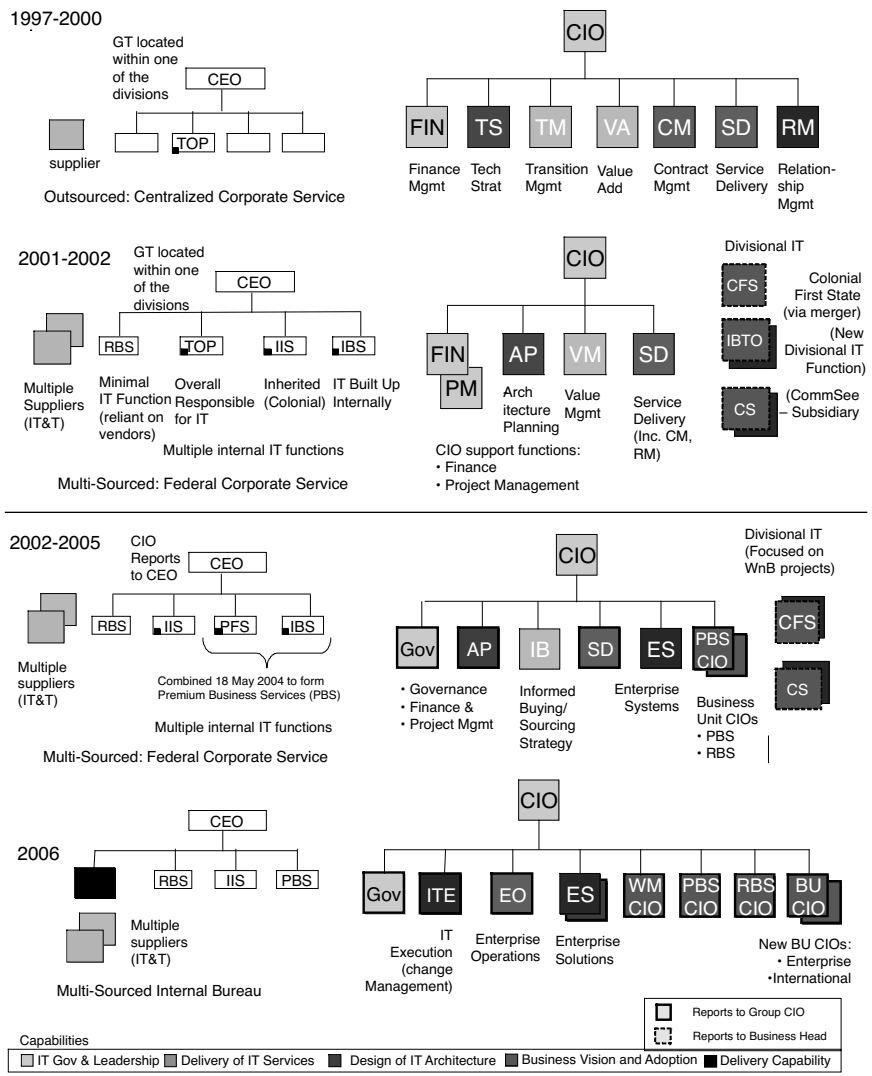

Figure CS 1.4 CBA IT operating model and CIO direct reports 1997–2007

This structure focused on its alignment to business units, with the primary focus on each of the business unit CIOs and business systems thinking capabilities. A new set of challenges were presented to Harte as he focused on "*getting the best value from technology investments by leveraging the capabilities and standardising our technology offerings*." For Harte, a new set of challenges seemed to include:

- providing a group-wide leadership model of IT;
- leveraging IT capabilities and expertise to revitalize systems;
- implementing smarter sourcing; and
- continuing to develop lean and efficient processes.

All these had huge implications not only for the internal IT capabilities required but also for his wider strategy. Harte was thinking: how should I cope with these challenges? Am I doing the right thing?

CASE STUDY 2

Transforming a human resource function through outsourcing: The BAE Systems – Xchanging enterprise partnership

Mary C. Lacity, Leslie P. Willcocks and David Feeny

Synopsys

Imagine you are the head of a back-office function in a multi-billion dollar, globally dispersed manufacturing company. Your CEO mandates that you have three years to slash your costs by 40% while improving service levels. A mission impossible?

Welcome to the year 2000 world of Terry Morgan, Group Human Resource Director at BAE Systems. Prompted by the merger between British Aerospace and Marconi Electronic Systems, Terry's CEO, John Weston, required all executives to radically cut costs to help deliver the £275 million (US$ 400 million) in savings he promised investors.

Terry figured the only way to deliver the cost cuts was to centralize, standardize, and downsize Human Resource (HR) operations, which comprised over 700 HR staff in 70 locations. But the powerful business units would not willingly relinquish control over their HR resources. Senior management would probably not make the upfront investment in technology and physical facilities required for centralization. And his HR management lacked the skills and experience to orchestrate such a radical change.

Clearly, Terry needed an infusion of outside expertise. But his outside options had significant downsides. Management consultants were effective in the short term, but often failed to transfer skills or to be accountable for ongoing results – not to mention expensive. Traditional, fee-for-service outsourcing of back office functions at British Aerospace (BAe) had historically led to higher costs, marginal service, and little innovation due to misaligned incentives. While Terry and his team were debating these options, in walked David Andrews, founder and CEO of a new company called Xchanging.

David Andrews proposed that BAE Systems and Xchanging should form an enterprise partnership. BAE Systems would transfer HR assets and personnel to the enterprise partnership, and the enterprise partnership, in turn, would deliver HR services back to BAE Systems. Amongst other things, both parties would share equally in the savings from centralization, standardization, and improved efficiencies.

In February 2001, BAE Systems signed a ten-year, £250 million deal with Xchanging. They created the enterprise partnership initially called Togethr, subsequently known as Xchanging HR Services. After its first year of operations, BAE Systems had already received the following benefits:

- 10% savings on baseline HR services;
- service improvement in many HR processes;
- new HR capabilities rolled out to over 40,000 users in BAE Systems;
- a new state-of-the art shared service center was built and occupied;
- retained BAE Systems HR managers were able to focus on more strategic HR activity;
- transferred BAE Systems staff were retrained to make them more service focused.

Of course, such a radical transformation is never completely painless. This case points to the challenges that arose, how the partners coped with them, and prospects for the future. Furthermore, the realization that HR was responsible for an annual £80 million procurement spent in indirect categories subsequently prompted the idea of a second enterprise partnership with Xchanging called Xchanging Procurement Services. But let us step back to the beginning of BAE Systems' and Xchanging's enterprise partnering.

BAE Systems: The customer context

British Aerospace was formed as a Government owned enterprise in 1978, from a series of independent companies in the UK aerospace industry. It

brought together businesses which included military aircraft, commercial aircraft (through its share holding in Airbus), Jetstream (commuter aircraft), Dynamics (missiles), and Royal Ordinance (weapons). Since its inception, BAe has continued to foster the independence of its operating divisions. Business units are in charge of their own profitability and support services, including HR. The decentralized culture was required because each strategic business unit (SBU) operated under drastically different production, marketing, and legal environments. For example, the Airbus division may produce a handful of products (aircraft) per year, whereas another division, like Royal Ordinance, may produce 90,000 products (weapons) per year.

In 1985, BAe went public under the Conservative government's privatization program. BAe then embarked on a series of acquisitions, including the purchase from government of the Rover car group. In the early 1990s, BAe was confronted with loss of sales due to the end of the cold war and economic recession. In 1992, it reported losses of £66 million on sales of £10 billion, and its stock prices plummeted from £7 per share to £1 per share. BAe was under-capitalized, with too many liabilities on the balance sheet. BAe senior management sought to improve profitability by focusing on core competencies in aircraft, divesting non-core divisions, and refinancing the company. BAe subsequently sold Rover, Corporate Jets, and Ballast Nedam. BAe reduced headcount by 21,000 employees. As a result, profitability increased to £230 million on £11 billion in sales in 1994. But from 1997 through to 1999, BAe's sales growth stagnated (see Table CS 2.1). Clearly, BAe needed to expand their global markets.

In January of 1999, British Aerospace and GEC proposed a merger between British Aerospace and GEC's Marconi Electronic Systems to create a global aerospace and defense company called BAE Systems:

> *"The proposed merger with Marconi Electronic Systems is an important step in the consolidation of the industry in Europe and creates a strong and highly capable business with significant cost benefits*" – Sir Richard Evans, Chairman of the Board, BAE Systems.[1]

Investors were promised that the synergies from the merger would result in annual cost savings in excess of £275 million within three years of completion of the transaction. While BAE Systems would continue to invest in their core capabilities in military aircraft, weapon systems,

[1] Chairman's Statement, February 24, 1999 in BAe 1998 Annual Report.

Table CS 2.1 BAE Systems' five year financial performance

	1997	1998	1999	2000	2001
Sales	£8,546m	£8,611m	£8,929m	£12,185m	£13,138m
After tax profits/ (losses)	£164m	£693m	£328m	(£19m)	(£128)
Fixed assets	£2,159m	£2,522m	£9,192m	£10,358m	£10,142m
Capital & reserves	£1,452m	£2,026m	£7,445m	£7,077m	£6,658m
Earnings per share	£8.2	£38.4	£16.2	£(1.5)	£(5.1)
Employees	43,400	47,900	83,400	85,000	70,110

nuclear submarines, and large commercial aircraft, all support functions were mandated to deliver significant cost savings.

The HR vision: Toward shared services

In the area of HR management, BAE's Group HR Director, Terry Morgan, was charged with delivering a minimum of 15% cost savings with a stretch target of 40% on an estimated annual HR internal spend of £25 million while maintaining the same level of service. At that time in 1999, Group HR was actually a small department, focusing on senior pay and benefits, senior level development, resourcing, and organizational design. Nearly all of the HR headcount, some estimated 700 people, were decentralized within the SBUs. Here, the decentralized HR people delivered transactional activities, such as payroll, benefits administration, recruiting, and training as well as professional services such as training design, industrial relations, and HR procurement (see Figure CS 2.1). Terry Morgan believed the only way he could deliver the mandated cost savings was to centralize much of HR into shared services.

Morgan assembled a team to investigate the shared services concept:

- Chris Dickson – responsible for senior management pay and benefits in the HR head office; became one of the lead architects of shared services.
- Alan Bailey – a 20-year BAe veteran who had moved from engineering to project management to HR; became the team's project manager.
- David Bauernfeind – seconded from a financial controller role in BAe; analyzed the financial consequences of shared service options.
- Steve Hodgson – HR Director for BAe's Royal Ordnance business; one of those who represented business unit interests in plans for shared HR services.

- Kim Reid, HR Director for the Customer Solutions and Support business group; in a similar role as Mr. Hodgson.

According to Chris Dickson, the team had in mind that 80% of HR was probably transactional activity and only 20% of HR was strategic or core. Thus the team proposed a design of HR shared services that entailed a significant centralization of HR headcount and resources, leaving only HR directors and small HR teams in the SBUs.

Implementing shared services: Options

Initially, the HR team considered three possibilities for implementation of shared services. The pros and cons of these options were seriously debated.

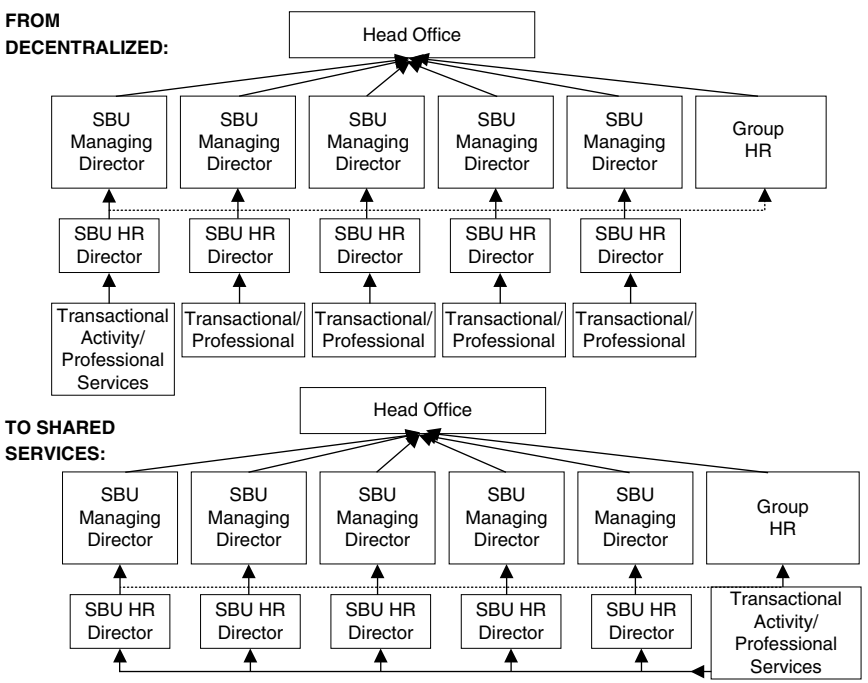

Figure CS 2.1 BAE Systems' vision for transforming human resources

Do-it-yourself

The major benefit of doing it themselves was direct benefit from the savings without sharing them with a third party. Also:

> *"Line managers and even the COO argued something like this: "well if another bunch of people can come and extract some value from this, why aren't we doing it?"* – Steve Hodgson.

However, there were some major impediments to doing it themselves. The HR team knew a request for HR capital funding in, for example, Web-enabled HR would probably be rejected:

> *"The company's priorities are investment in the engineering and research and development, not in good old HR"* – Chris Dickson.

> *"It was a daunting task as a do-it-yourself kind of tactic. People did not want to lose control of resourcing, people were not prepared to change"* – Alan Bailey.

Furthermore, senior management perceived that an infusion of external energy, experience, and skills were needed:

> *"I was pretty clear that the organization would never make the degree of change that was necessary to get to a slick shared services organization. So long as it was part of BAE Systems, it would never have been a high priority"* – Steve Hodgson.

Management consultancy

The HR team considered whether to hire an outside management consultancy to manage a one-time, big-bang implementation project. By bringing in prestigious consultants, senior management would, amongst other things, signal to the organization that they had committed to the project, which would be done "come hell or high water." But the HR team identified major risks of cost escalation, lack of sustainability of results, and lack of skills transfer:

> *"As part of an exercise of examining all the alternatives I fairly quickly concluded that doing it in-house or being invaded by consultants were probably the least preferable ways of doing it if I wanted to achieve the savings"* – Chris Dickson.

Fee-for-service outsourcing

The HR team seriously considered a traditional, fee-for-service outsourcing option. With fee-for-service outsourcing, a supplier would take over their HR assets and people and deliver services back to BAE Systems through a long-term contract. This could give an external infusion of energy and skills, the ability to bypass internal politics, and the clear message that services would be centralized. Furthermore, the outsourcing supplier would be accountable for results because they would both implement and operate the shared services.

But BAE Systems were wary of this option. With some prior outsourcing deals, BAE Systems found that once central control of the budget is gone, demand for services – and thus costs – runs amuck. For example, managers within BAE Systems complained that their information technology (IT) costs are too high since they outsourced IT to IT service supplier CSC in 1994. Another example: BAE Systems used to provide chauffeur services in-house with a fleet of four cars. Now that chauffeurs are outsourced, there is no constraint on demand, such as "you can't have a car because they are all booked." The supplier had recently increased the fleet to 24 new Omegas to meet the unwatched demand.

BAE Systems management also feared the possible lack of sustainability with fee-for-service outsourcing. While BAE Systems enjoyed an initial one-time, upfront savings with many of their outsourcing deals, over time, it found that some suppliers lacked incentives to sustain innovation, to improve service, or to share additional cost savings with BAE Systems. A further negative consequence BAE Systems experienced with fee-for-service outsourcing was power asymmetries developing in favor of the supplier. It is very difficult to award additions to a contract to an alternative supplier. For example, even if BAE Systems could buy additional IT services from a supplier other than their current one, these services would still have to be implemented and delivered on the current supplier's networks.

In the midst of debating these three options in early 2000, a serendipitous fourth option emerged:

> *"I came across this proposition which David Andrews (Founder and CEO of Xchanging) happened to land on my desk at exactly the right time. It was a different model, a partnership model*" – Chris Dickson.

Introducing a fourth option: The enterprise partnership

David Andrews proposed that BAE Systems and Xchanging should form a fifty-fifty jointly owned enterprise. The enterprise would be operated

as a strategic business unit within Xchanging, giving Xchanging the responsibility and accountability for implementation and subsequent operations. But both BAE Systems and Xchanging would sit on the Board of Directors to ensure continued customer involvement and oversight. The enterprise would initially behave as a traditional outsourcer by transferring BAE Systems HR assets and personnel to the enterprise governed by a ten-year contract. The enterprise, in turn, would implement the shared services concept and deliver HR services back to BAE Systems. But in the long run, the enterprise would further leverage the HR assets and personnel to attract external HR customers, of which profits would be shared fifty-fifty with BAE Systems. Andrews also promised the following:

- Transfer top talent to the enterprise to ensure the necessary infusion of experience, energy, and competency.
- Deliver cost savings for five years to BAE Systems in the form of a rebate.
- A commitment to invest in technology, primarily to implement eHR.

Chris Dickson and his colleagues were immediately attracted to the Xchanging Partnership model. But there was an obvious risk: as a new company, with no existing revenue stream, the potential of Xchanging experiencing financial difficulties in its first few years seemed very high. However, the HR team was impressed by Xchanging's executives:

> *"The main reason was probably to do with the individuals, what seemed to be a very high* caliber *of people from Xchanging"* – Steve Hodgson.

On finances, they knew that General Atlantic Partners had committed US$ 50 million in venture capital to Xchanging. Clearly, Xchanging had cash to develop their business. However, many in BAE Systems management continually focused on the risks of this fourth option. Terry Morgan finally put the risk issue in perspective for them:

> *"I have got the same people tomorrow doing the job they are doing today. In addition to that, I have got all these new resources with different skill sets that are coming to help these people do it better than they did it before and I have got twenty five million dollars over a five year period to invest in technology that I have not got today. It is guaranteed, it is part of this contract. In addition to all these other*

resources that are going to help make it move, with some incentives to make it happen that we haven't got today, what is the risk because if it all goes wrong and these are bad managers, then we just TUPE transfer[2] *everybody back and we take it back again, so what is the real risk?"*

The beauty pageant: Inviting suppliers to compete

The HR team wanted to step back from their initial preference and invite Xchanging and another supplier to compete. Both suppliers made presentations to BAE HR directors in May 2000 and submitted formal proposals. Afterwards, the HR team members independently scored the two suppliers, then met to select a winner. The numbers were surprisingly close, but Xchanging scored slightly higher overall on everyone's score sheet. Four issues swayed the vote in favor of Xchanging: *employee transfer proposal*, *supplier attention, implementation proposal*, and *Xchanging capabilities.* They are discussed below.

Employee transfer proposal

Xchanging proposed to accept all of the existing HR personnel BAE Systems identified for transfer. Xchanging proposed to locate the service centers for transferred employees in Preston and Farnborough, close to their current residences. In contrast, the alternative bidder proposed to use their existing service centre staff, with very few BAE Systems transfers. Xchanging's proposal was an easier political sell to the unionized HR staff.

Supplier attention

The alternative bidder – Exult – had just signed a huge contract with BP, a large multi-national, and the HR team feared that the supplier would be over-extended. In contrast, Xchanging would focus their resources and attention because this was Xchanging's first large deal.

[2] In a TUPE transfer, an employee who is a Trade Union member transfers his or her full employment terms and conditions to the new company and job.

Implementation proposal

The alternative bidder wanted BAE Systems to clean up their internal delivery first before taking it over, arguing that BAE Systems would receive all the benefits from the one-time savings. In contrast, Xchanging wanted to take over the service immediately, "warts and all". They proposed a gradual implementation plan with four phases: preparation, realignment, streamlining, and continuous improvement (see Figure CS 2.2).

Normally, a fee-for-service outsourcing implementation begins after a contract is signed. But in the Xchanging model, implementation actually begins when a Letter of Intent is signed. The *preparation phase* begins to examine the "as-is" service to identify preliminary process improvements and to prepare for the people transition. The preparation phase positions Xchanging to immediately charge into realignment once the contract is signed.

During the *realignment phase,* most of the work centers on the induction of the transferred people, the detailed due diligence of the as-is service, and the final sign-off of cost. Process teams also grab the "low-hanging fruit" by implementing quick and obvious improvements.

During the *streamlining phase*, the organization is restructured, technology is implemented, processes are significantly re-engineered, and shared service center facilities are created and populated. The focus of this phase is on extracting significant cost savings while improving service.

The *continuous improvement phase* is the final phase. Although none of Xchanging's deals had, by mid-2002, reached this level of maturity, the idea was that the transferred employees would have been sufficiently moved to a front office mentality to continually deliver cost and service improvements.

Xchanging's capabilities

Within the four implementation phases, Xchanging proposed to enact seven well-defined competencies (known as the Xcellence platform) as needed:

- *The Service Competency* defines "as-is" service, measures service, and agrees to improved service targets through a disciplined methodology called Service1st.
- *The People Competency* builds "champion teams" from transferred employees to unlock their talent and energy.
- *The Process Competency* improves both costs and quality through the Six Sigma quality improvement discipline.

- *The Technology Competency* builds and implements enabling technology, such as eHR.
- *The Environment Competency* builds modern and well-branded physical spaces, such as shared service centers.
- *The Sourcing Competency* uses consolidated buying power and expertise, and a unit-based cost analysis discipline, to reduce procurement costs significantly.
- *The Implementation Competency* orchestrates the timing of and resources required for dispatching the other six competencies.

Based on Xchanging's capabilities, employee transfer proposal, expected focus of attention on BAE Systems, and implementation approach, Xchanging won the beauty parade. The HR team now had to sell their plan to top management:

> *"We went to the executive committee in late May of 2000 and said, "you asked us to deliver some savings, we have been through these four approaches and decided a partnership is what we want. We've done a beauty parade between these two suppliers and we have chosen this one and this is the outline commercial package and we want the authority to proceed*" – Chris Dickson.

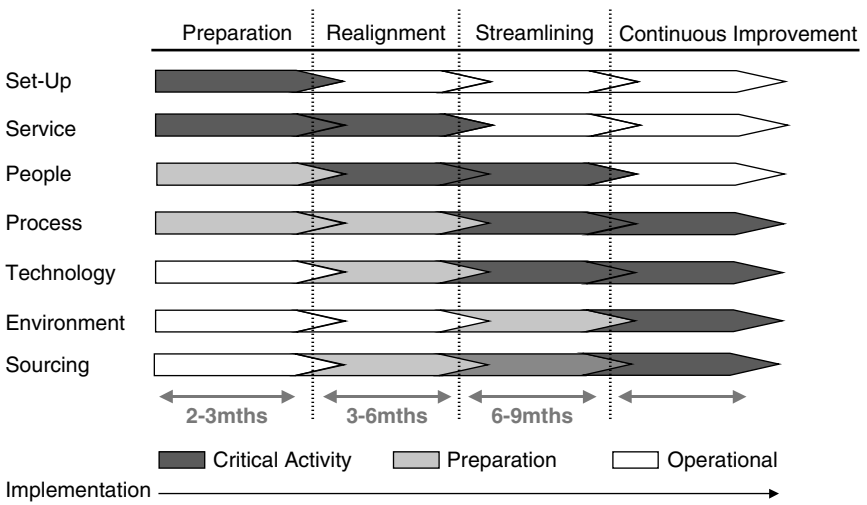

Figure CS 2.2 Potential deployment of Xchanging's seven competencies across the four phases of an implementation plan

Source: ©Xchanging, 2002

After some debate, the BAE Systems Executive Committee agreed that this was Terry Morgan's call, and gave him authority to sign a Letter of Intent with Xchanging. After six weeks of negotiations, the six-page Letter of Intent was signed in June 2000. The Letter of Intent described the overall governance of the enterprise, the technology investment to be made by Xchanging, the number of people and resources that would be injected into the new business from both parties, and the geographic scope of the deal which was to be across the whole of BAE Systems.

Preparation and the path to contract signing

The HR team and Xchanging hoped to complete the preparation phase and sign a contract by September 2000. Good progress was made on the former, but the contract negotiation process eventually lasted nine months. Many BAE Systems managers, although theoretically supportive of an enterprise partnership, still vigorously fought to protect BAE Systems:

> *"We had some very lengthy, detailed debates. We were being forced to go through what we thought at times was pretty laborious and unnecessary debates, but the organization was forcing us to do this and therefore it got a bit heated because you were always looking at doomsday scenarios rather than, this is exciting, this is positive, there is an upside. You were always looking at "yes but what happens if"*– Alan Bailey.

As various SBUs became involved in negotiations, the scope of the deal came under attack. SBU HR Directors had agreed to the principle of the design, but argued for more retained personnel than the target 20%. They claimed that some of their official HR headcount actually performed non-HR functions such as health and safety, and facilities management because HR had become a collecting ground for miscellaneous activities. Also, many of their HR staff had split duties among HR and non-HR functions, so how can you transfer half a person?

> *"Despite all the lobbying and despite all the comments I had been around and talked to everybody and getting their feedback. They basically said, "don't like it, feels uncomfortable, we just can't get our mind around HR staff not part of the company advising our line managers"* – Chris Dickson.
>
> *"So we ended up drawing a line in slightly the wrong place, in my view, so we still had some people in BAE Systems' retained HR who were never going to play the strategic role as designed"* – Steve Hodgson.

A particular setback came when the business case developed was presented to the BAE Systems Executive Committee in September 2000, and the CEO of the North American business was reluctant to relinquish his control of HR to a new UK company. Thus, North America was removed from the initial scope.

During these management debates, the HR team and Xchanging agreed that the HR staff should be fully informed throughout the negotiation process. This took the form of town meetings, brochures, regular newsletters, and a Web site where people could ask questions. It was a key aspect of the Preparation phase, and a successful one.

The HR employees were pleased that Xchanging agreed to offer an equivalent pay and benefits package. The HR employees were told that Xchanging was committed to deliver cost savings, which would include some headcount reduction. But the employees' chances for continued employment would be much better with a company like Xchanging focused on external growth, rather than remaining within BAE Systems which would significantly reduce headcount.

Finally, in November 2000, the BAE Systems executive committee approved the revised business case and told HR to proceed with commercial negotiations. Negotiations became much more focused, and a final agreement was signed on February 22, 2001, to be effective May 1, 2001.

Contract details

The BAE Systems-Xchanging HR contract is worth £250 million and endures for ten years. The new enterprise, initially called "Together" became Xchanging HR Services to provide consistent branding across Xchanging contracts and to assist the development of third-party business for the partnership. Highlights of the contract are summarized below.

Costs: From a BAE Systems perspective, all cost savings would be shared fifty-fifty in line with the ownership structure. However, Xchanging guaranteed a proportion of these savings whatever XHRS's financial results. Cost savings would be delivered through a rebate mechanism. After five years, BAE Systems and Xchanging will re-base the price using a cost-plus model for the remainder of the ten-year contract. After ten years, the deal will become an evergreen contract, with right to 12 months notice of termination by either party.

Services: Xchanging is required to provide the "as-is" service measured during the first six months of operation. The contract also requires

Xchanging to improve on the baseline service to 'upper quartile' by the end of year five. To help ensure seamless service, BAE Systems line management will be encouraged to contact the enterprise for any HR-related request and Xchanging will determine whether the enterprise should respond or whether retained HR personnel should respond.

Resources: Xchanging promised to make a US$ 25 million investment, primarily in information technology to realize eHR. At BAE Systems, 462 people were identified for transfer, together with another 53 positions at that moment vacant.

Governance: Much of the contract specifies how the parties will govern the enterprise, including the identification of three boards:

1. *Board of Directors.* The Board of Directors comprises both Xchanging executives as well as BAE Systems, HR Executives and non-HR Managing Directors. BAE Systems insisted on the latter as Board members to ensure that the enterprise is run as a business, not just an HR function. Xchanging has a majority of the Board to ensure operational control. The Board of Directors meets quarterly to do an overall business review:

   "You have certain duties as Board members: you have to act in the best interests of the enterprise, not your individual company. That is a big mind set change. It's brilliant because you have rules like the Board of Directors have to turn up for meetings. Could I get the sponsors to turn up for meetings on my previous outsourcing deals? Well, maybe, but it was hard work. When you have a Board meeting, you have to be there" – David Andrews, CEO of Xchanging.

2. *Service Review Board.* The Service Review Board (SRB) is a committee, with equal membership, charged with ensuring excellent HR service by monitoring service delivery and quickly remedying service problems. A service problem escalated to the SRB requires an action plan to remedy the situation within a three-month period. The SRB is given teeth through provision for price reductions for inferior service or no charges for extremely poor service, but both parties would consider it a failure if these options were ever exercised. The Board's can oust the Enterprise Partnership CEO for continuing poor performance.
3. *Technology Review Board.* This board, also jointly populated by Xchanging and BAE Systems, was created to ensure that appropriate Xchanging IT investment.

The realignment phase: May 2001 to October 2001

In May 2001, 462 BAE Systems employees formally transferred into the Enterprise Partnership. Among them were Alan Bailey and David Bauernfeind who had both chosen to join the management team of Enterprise CEO Richard Houghton, a man they had come to know well across the negotiating table.

Also in the team was Mike Margetts, seconded from his role as Practice Director of Xchanging's Implementation competency. His job entailed deciding when and how to dispatch Xchanging's other six competencies to greatest effect:

> *"I don't want to tell you the perfect process for implementation project management, I actually want to say that I am prepared to do anything I need to get things done. ...basically it is an anti-approach. Methods are not really important – the end result is everything."*

That said, a lot of responsibility fell upon some of the other competencies to start driving out results rapidly.

The people competency

This competency was particularly prominent in the Realignment phase. The first people activity was a major launch event, which included a video by the CEO, Richard Houghton on how they are no longer a cost centre but a profit centre, that the changes would be gradual over six months, but in the meantime, transferees should just conduct business as usual:

> *"Richard Houghton was saying, it's business as usual today guys because we don't want to upset the service. We are not going to go around now to BAE and say, "I'm not doing that for you any more Mr. Customer because it's not in the service definition yet." We have a philosophy that says if he wants you to do something, you just do it. If there is a commercial consequence of that we will worry about it later and talk to your Line Manager but it is a yes to the customer, not a no"*– Alan Bailey.

The next people-focused activities were three-day induction sessions, in which all transferees participated within the first six weeks of the effective

contract date. During the first two days, the management team addressed the staff:

> *"The transferred employees had seen Xchanging's management team, because we all went to these things, stood on the stage and answered all their questions. They had been in an area where they didn't see the management very often, didn't get access to them and then all of a sudden, this is an enthusiastic team that they are now seeing and they were part of it, they went back buzzing"* – Alan Bailey.

But the induction sessions were not only about creating a welcoming environment, but also about explaining the realities of a commercial enterprise:

> *"We started up by saying "these are the cost reduction commitments. We'd have to double productivity in five years, in so far as we can offset that through third party revenues by effectively using spare capacity to deliver services to third parties, we will, but that's what we are going to do"* – Richard Houghton, CEO.

John Attenborough, Xchanging's original Practice Director for the People Competency, focused the third day of training on how most people in transitioned situations feel and behave. He uses the model of people moving through the stages of ***mourning*** their old jobs, ***forming*** cautious views of their new roles, ***storming*** or confronting the new organization, ***norming*** (when transfers becomes a fragile team), to the final stage of ***performing*** when employees become fully committed to the success of the team. All these behaviors were not only explained to the transfers, but Xchanging gave them tools to measure their progress through the stages.

The service competency: Defining the "as-is"

In parallel, Xchanging's service competency was implemented through a program called Service1st. This Web-enabled approach defined Xchanging's mission for BAE Systems, identified baseline services and the recipients of services, and agreed services in terms of standards, volume, and price. In Xchanging's model, baseline services are identified after the contract is signed, not during due diligence:

"One thing in this business you cannot underestimate is, no matter how long from the outside in you try to do due diligence, you will always get it wrong. It's only when you actually go in there and start running it that you find out what's going on and the sooner you do that the better for everyone" – Richard Houghton.

Therefore, it is vital that Xchanging documents baseline service as one of their first implementation activities. Practice Director for the Service competency, Bryony Moore, was another of Xchanging's team seconded into the Partnership to lead this work. During the realignment phase, her team baselined hundreds of HR services:

"*You can imagine in a company like BAE Systems which had just gone through this massive merger, they have got over 70 sites, on each of those sites, there are often multiple BAE Systems businesses, a history of conjoined businesses and different cultures and everybody thought that their bit of HR was different from everybody else's. We now have one operating HR Service specification for the whole of the BAE Systems in the UK* "– Bryony Moore.

The completed Service Definition was ratified by the Service Review Board in October 2001, together with a procedure for changing service definitions caused by large changes in volume or changing business requirements without having to renegotiate the contract. From that point on, the Service Definition has been available live on the Internet-based version of Service1st. At its highest level, it defines eight service classes:

- reward and recognition;
- learning and development;
- resource management;
- employee documentation;
- HR information services;
- international resources;
- pension management;
- advisory and support service.

Service classes drill down to more than 400 specific service definitions. Each service definition describes which of the ten stakeholders within BAE Systems are the target customers: current employees, past employees, future employees, the company, BAE Systems' suppliers, BAE Systems'

customers, the community, external governing bodies, joint ventures, and trustees. Xchanging's massive task was not only an exercise in sound service management, but also a way to demonstrate to BAE Systems that they are trustworthy.

Having established the trusted baseline of service definition, it serves going forward as the basis for both customers and providers to measure performance; and the start point for any discussion of changes to requirements in the service itself or the process by which it is delivered. It was critical to Xchanging's ability to re-organize the partnership around Service Lines in the forthcoming Streamlining phase. And it is then the start point for the Service competency's contribution to helping move transferees from a "back-office" to a "front-office" mindset:

> *"It is very much a relational role. Service has to make sure that we are constantly meeting our customers' expectations. And when I talk service I mean everything – it is how we are viewed, what impression we give, how the phone is answered, what does the office look like when people come into it"* – Bryony Moore.

The procurement competency

In the standard Xchanging model, another competency expected to start making a contribution during Realignment is Procurement. In this case, however, the procurement contribution turned into a story in its own right.

During Realignment it became apparent that, while HR represented a direct cost to BAE Systems of £25 million per annum, it was also the agent for no less than £80 million per annum of procurement. This was a highly decentralized and fragmented spend for items such as cars, health care, and non-technical contract labor such as clerical staff and cleaners from an estimated 200 suppliers. This spend had begun to be closely managed but Xchanging saw further opportunities for improvement by consolidating the buying power and negotiating harder with fewer suppliers. Given the scale and scope of this HR procurement, BAE Systems and Xchanging felt it needed the attention of a separate enterprise partnership. This led to the establishment in November 2001 of Xchanging Procurement Services (originally called Pro-cur), a partnership deal worth £800 million over ten years, headed by Rich-Jones as CEO.

The technology competency: Delivering eHR

The other Xchanging competency hard at work during Realignment was Technology. Xchanging had committed to launch the first version of eHR, called peopleportal, within six months of signing the contract. Xchanging's CEO believed this date was realistic because Xchanging Practice Director for Technology, Steve Bowen, already had a detailed technology blueprint based on re-usable components. He had adopted the learning his CEO had absorbed from a previous assignment:

> "*I think we took it to a new level with the distinctiveness of the component-based architecture. Because typically people say you need to define functionality first, you can't build a system until you define functionality. I say you often don't define functionality for two years. We can't wait for two years, so we built a structure with components within six months, while you are deciding the functionality, we can have it up and running. And what we did was turn the model upside down. Whereas in most Systems 80% of the code is functionality and 20% is the technical architecture, if you adopt a component driven approach, you can put it to 80% components and 20% functionality. Rather like cars today. They all look different but they are all the same underneath"* – David Andrews.

At first, Steve Bowen thought he could hire suppliers to actually build his design. This quickly proved too expensive and too risky, with the suppliers retaining all source code knowledge. Steve Bowen's team grew to 19 full-time technology managers, architects, and specialists supplemented by six contractor workers hired through mid-2002. The impact was profound in BAE Systems when Xchanging successfully launched the first version of peopleportal on October 4, 2001. The launch of peopleportal marked a high profile transition from Realignment to Streamlining:

> *"I think the people portal has been the first sign from within the business that something has changed, something has actually happened. I think the first time it was used, it was used for the senior leadership population, we were doing an exercise on pay review so each senior leader within the business (650 of them) had access to that peopleportal. We had a lot of very good feedback, it was very good, the technology was great, it was web based, but we've also had people who just can't get the hang of using the technology"*– Kim Reid.

The streamlining phase: November 2001 to December 2002

The Streamlining phase formally commenced with sign-off of the cost base and the service definition on November 1, 2001. The Streamlining phase is where Xchanging transformed HR to a truly front-office operation in terms of organizational structure, physical facilities, employee mentality, and service delivery. In short, Xchanging HR Services became a customer-facing business. But as a business, Xchanging also needed to ensure XHRS's profitability.

Reorganizing to shared service streams

On January 1, 2002, Xchanging HR Services was reorganized along service streams (see Figure CS 2.3). Overall, there are seven Service Stream Heads and initially 40 service stream team leaders now in charge of cross-business services.

Each service stream now operated as its own mini-business, with the same Service Heads understanding that they are responsible for further cost reductions and further streamlining. Where possible, productivity improvement would come from leveraging resources to deliver external business, but during the Streamlining phase, there were only a few instances in which productivity improvements were delivered from increased revenues. For example, Xchanging increased the revenue stream in the training business by £500,000 to cover the required 15% unit cost savings.

In reality, most of the savings by mid-2002 came from downsizing staff numbers, often through not filling vacancies and re-distributing work more efficiently. For example, recruitment, when consolidated, comprised 106 HR people but Xchanging estimated that this could easily be reduced by 40%, with a centralized team of only 40 people and a reduction from 40 team leaders to 22. The HR staff transferred, including temporary staff, totaled 515; this number was reduced to 460 by April 2002 and would be reduced to less than 400 people by year end 2002.

The environment competency: Moving to shared service facilities

David Andrews saw physical facilities as another major lever in transforming transitioned staff to a front-office mentality and creating a brand

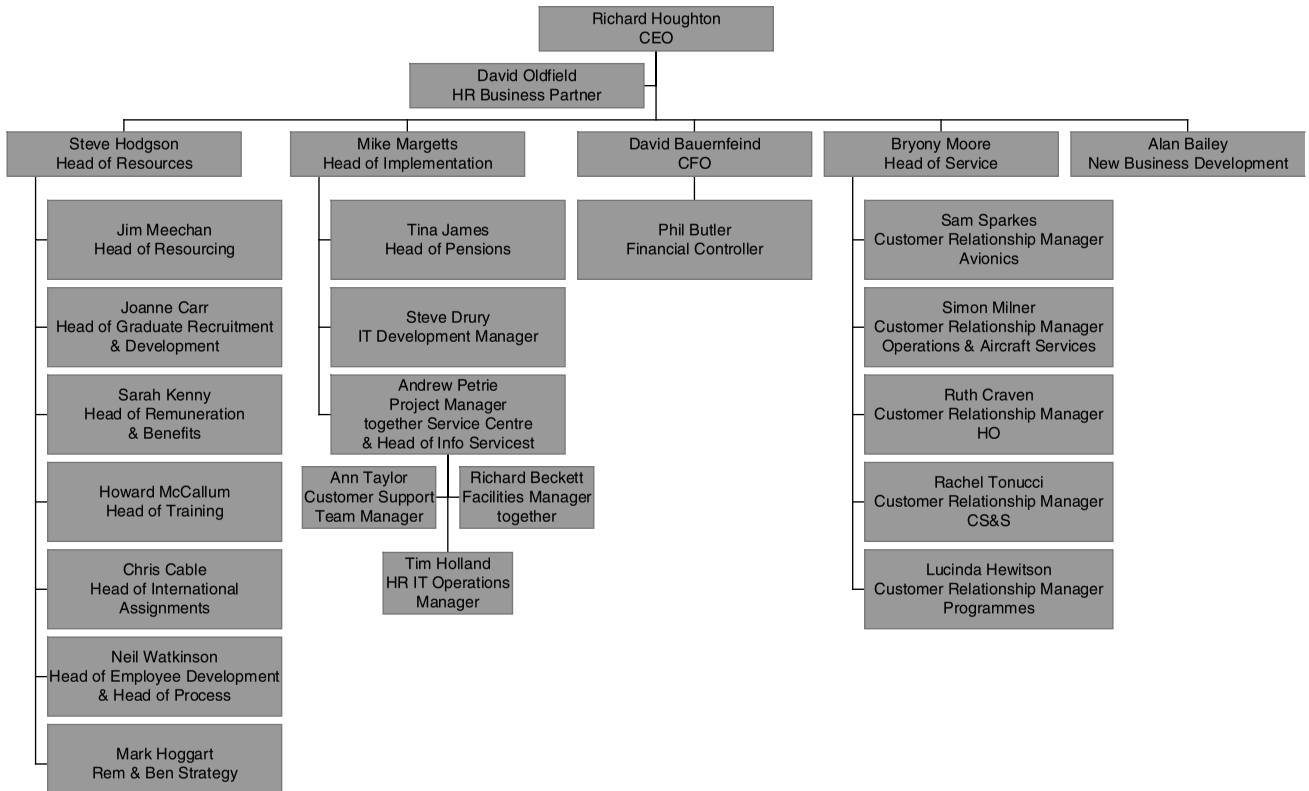

Figure CS 2.3 Xchanging HR service organizational structure after initial streamlining

image in the minds of the customers. His views were formed when he was based in Paris as Head of Accenture Europe. He worked with architect Andrew Chadwick to design a state-of-the art facility in the center of Paris. This facility was not just a space in which employees could work productively, but a testament to Accenture's continental presence and positioning. Andrews credits much of the business turnaround there to this new beacon of branding.

As Practice Director for Xchanging's Environment competency, Andrew Chadwick designed a state-of-the art shared service facility for Xchanging HR services, located in Preston, in the center of BAE Systems concentration of activity in North West England:

> *"Space has a big impact on people's morale and the perception of their value, this is where our environmental capability comes in and the service centre in Preston will be a show piece*" – Mike Margetts, Xchanging.

Xchanging had successfully erected the Preston building, bought the furniture, and decorated the site by February 2002, but the building could not be occupied until BAE Systems' IT supplier installed the IT infrastructure. Xchanging was frustrated that occupancy was delayed because of BAE Systems' IT supplier, CSC – Xchanging expected the supplier to treat them as a preferred customer. But from the supplier's perspective, the BAe-Marconi merger had created a flood of new IT demand and Xchanging's demands were competing with the core part of BAE Systems' business:

> *"Xchanging has to work with [the IT supplier] because they are our IT providers. Should we say it's a relationship inherent with creative tension?"* – Chris Dickson.

The service competency: Moving to service excellence

From day one, five Customer Relationship Managers were appointed, aligned to the major business groupings of BAE Systems. These people were expected to become integrated, if virtual, members of the SBU HR teams retained in BAE, to be the front end of the new front-office culture. During Streamlining, the Service Team also created and delivered a Service Excellence training program to the entire Xchanging HR Services staff between the months of March and May 2002:

"The area that I can have the biggest impact during streamlining is on training and changing the mind of our own people to give them a practical way of operating differently. We said it is very different working for a service organization *where HR is the core business, not a back office function. We have to get everybody up to a certain standard and the pace at which we are going to work is much faster and tougher than you are used to, the standards and attention to detail are absolutely primary" – Bryony Moore.*

The process competency: Low hanging fruit with more to come?

The seventh competency adopted by Xchanging is Process, adopting Six Sigma methodology made famous by Jack Welch's success at General Electric. The Six Sigma methodology is a strategy for satisfying the customer's needs profitably, primarily by reducing the number of defects in processes. Achieving "Six Sigma" in a process means that there are, on average, only 3.4 defects per million opportunities to make an error. The theory of Six Sigma suggests that profitability increases when processes are improved because defects and exceptions are expensive. Thus, Six Sigma proponents reject the notion of cost/service trade-offs, believing instead that the key to lower costs is improving service.

From a governance stand point, Six Sigma at XHRS is implemented with three-tiered teams, called Master Black Belts, Black Belts, and Green Belts. Master Black Belts select the projects and mentor the Black Belts. Black Belts are employees devoted full time to the Six Sigma process, which requires an extensive training program and subsequent certification. Green Belts are part-time Black Belts who continue to work in their functional areas. Green Belts assist Black Belts with projects and integrate Six Sigma methods and tools in their daily work.

To establish the Six Sigma ethos at Xchanging, David Andrews hired Paul Ruggier, who previously delivered US$ 60 million worth of cost savings to Jack Welch in General Electric through the Six Sigma quality assurance program. Paul identified top talent among the middle ranks of transferees, training them up as Black Belts and deploying them to identify and champion fundamental process improvement within the XHRS Enterprise.

In the meantime, the pragmatic Margetts concentrated on spotting and harvesting the low-hanging process fruit. The senior leader peer review process serves as an example. BAE Systems wanted to implement this as a global process amongst its senior 640 executives. Traditionally, this would have involved local training, "super users," paper Systems and an extremely inefficient process. Instead, Xchanging rolled out a service based on peopleportal:

> *"What would have happened before, thirty people would have happily expanded a task to fill three months and as it is now, eight people have been busy for a month – bang! Done"* – Mike Margetts, Head of Implementation, Xchanging HR Services.

Progress by December 2002

Xchanging expected to complete the Streamlining phase by the end of 2002, 20 months after start up. Up to then, as Table CS 2.2 summarizes, the enterprise partnership had delivered on its promises. These included:

- substantial cost savings for BAE Systems on baseline HR services;
- service quality improvement in many HR services;
- new eHR capabilities rolled out to over 40,000 BAE Systems users;
- a new service center facility at Preston built and occupied;
- BAE Systems HR focusing on more strategic HR decisions;
- staff transferred to the enterprise partnership have been trained and re-oriented to "front-office" mindset.

The major challenges in the Continuous Improvement phase would be realizing revenue growth by attracting external customers to Xchanging HR Services and sustaining cost cuts and service improvements. On this last point, senior managers in Xchanging were confident that sustainability would occur:

> *"My view is that it's all about people. It's probably just following straight from where we were. In the first eighteen months it is about a small group of people, many of whom have done it before on something similar, picking the right team and then giving those people the confidence and skills to be able to deliver. That is the first eighteen months. After that, that group of people, with those skills and confidence, will do it for themselves; they won't need to be told, they will do it for themselves because they want the challenge. I'm absolutely convinced that is what will happen"* – David Bauernfeind.

Table CS 2.2 Major accomplishments at BAE Systems in December 2002

	Preparation	**Realignment**	**Streamlining**	**Continuous improvement**
Target time table for typical client	2 – 3 months	3 to 6 months	6 to 12 months	Duration of contract
Actual time table At BAE Systems	11 months Letter of intent signed June 2000 Contract signed February 2001 to begin May 2001	6 months May 2001 to October 2001	13 months November 2001 to December 2002	December 2002 to May 2011
Major accomplishments at BAE Systems	Data collected on BAE HR finances/ people Service objective & preliminary service definition Structure & people plans Cost modelling Financial reporting & control plans Technology architecture designed Constant Communication with targeted transfers	430 BAE staff are transferred Launch event 3 day staff Induction training Detailed "as is" service specification defined Detailed costs approved Launch first version of People Portal First process improvements made to recruiting	New organizational design Shared Service Centre established in Preston Regional teams established Downsizing staff 3 more versions of People Portal released Process improvements made to all HR Services	*Future challenges*: Attract external customers to increase revenues Sustain cost cuts and service improvements Upper quartile performance in all HR service areas

After one year of operation, the BAE Systems Group HR Director and Chairman, Tony McCarthy had expressed the following overall assessment of the partnership:

> *"A year has passed since we created Xchanging HR Services. We have learned a lot along the way and I would like to see Xchanging HR Services provide an example to BAE Systems of an entrepreneurial and "service first" mindset. This is essential to ensure that we continually meet our customer's expectations.*"

But while this case study has focused on the transformation of BAE Systems' back office, we should relate it to BAE's accomplishments in its core lines of business. BAE System's priorities were clearly to focus on increased sales in their core products and to recover profitability from

short-term losses caused by the merger. BAE Systems focused its transition year (2002) on securing future sales:

- Order book of £43.8 billion (US$ 70.08 billion), including 1,700 Airbus aircraft, 12 battleships, and 3,000 Joint Strike Fighters for US Department of Defense.
- Sales of £13.1 billion (US$ 20.96 billion).
- Customer base expanded now to all continents in 129 countries.

Commenting on the 2001 year results,[3] Chairman Sir Richard Evans said:

> *"2001 has been a transitional year in the company's development. Despite difficult markets, we have delivered on our plans and we have reshaped our commercial aerospace activities to remove risk and focus on the future growth we see in the commercial jet market. We have also brought about a fundamental shift in our defense business to reflect the growing emphasis on Systems and the importance of the US market."*

Future prospects

However, 2002 proved as difficult a year for BAE Systems as for most other corporations in its sector and elsewhere. Margins and orders declined in almost every division. BAE reported a £616 million loss after a series of cost overruns and UK government clashes that led to investor calls for fresh management A £750 million provision had to be made to cap the costs on the troubled Astute and Nimrod contracts. From a 1998 share price of 550 pence (¢550), BAE hit 100 pence (¢100) at the beginning of 2003. In 2003, margins faced further erosion from pension fund costs in the UK and US and a dearth of equipment deliveries. According to *The Financial Times* in February 21, 2003:

> *"Cashflow is inherently unstable, and working capital swings wildly. A latent security risk also overhangs BAE's important contracts in Saudi Arabia."*

All this raised further pressures on XHRS to deliver.

[3] BAE Systems Press Release, "REG-BAE Systems PLC 2001 Prelim Results," February 14, 2002.

Would the XHRS enterprise partnership continue into a successful Continuous Improvement phase, and meet the challenges as listed in Table CS 2.2 – new customers, relentless cost and service improvements and superior performance in all HR service areas ? If so, how? Would there be other challenges still? Could XHRS keep up to speed with the rapidly changing requirements of a BAE Systems operating in a volatile, global marketplace?

And what would happen to Xchanging itself, a relatively new start-up with four promising enterprise partnerships established by end of 2002 – two at BAE Systems and two – Xchanging Insurance Services (XIS) and Xchanging Claims Services (XCS) working at Lloyds Of London and the London insurance markets. Did Xchanging need more customers and more enterprise partnerships, or perhaps less, enabling it to focus activity on its existing clientele? And would the Enterprise Partnership model prove in the longer term to be a noticeably better way for organizations to leverage IT and business process external service providers than other extant models? And finally, David Andrews had made a good start. He was thinking by early 2003 of bringing Xchanging to market at some stage with an Initial Public Offering. Where did the real value of Xchanging reside, to its customers, but also to existing and potential shareholders?

CASE STUDY 3

PanGenesis: A creative Costa Rican approach to the persistent IT labor crunch

Erran Carmel

"We have an innovative workforce solution for offshore outsourcing," asserted Carlos Apéstegui, head of PanGenesis's Costa Rican operations, speaking to his guest. "We have a unique apprentice program to tap young Costa Rica students and a special approach to importing highly qualified labor into Costa Rica. We have created a formula that allows us to lower charge rates, perform faster development – and all this in this attractive small nation." He finished his sentence by waving at the many tropical plants all around him in the garden of the hotel which was hosting a large technology conference.

His guest was Paul Matzurski, a Deputy CIO at a large American corporation, who was visiting Costa Rica for the first time in search of new destinations for offshore outsourcing. Matzurski sipped his drink and said, "I didn't know the extent of the tight labor market here and even the rest of Latin America." He continued: "You know, 'Labor scarcity,' 'search for talent' and 'tight labor market' are all issues we deal with a lot in the USA. We hear about the tight labor markets in India and elsewhere. I was surprised to learn this is the case here in Costa Rica. Even (Costa Rican) President Arias spoke of spending more on education during his keynote address to this conference yesterday."

This teaching case is about a Costa Rican IT Services firm exploring the dilemmas of an international workforce and of growth. The case takes place in 2007. It was developed as a foundation for class discussions and learning. It is based on actual companies and events, though some minor details have been disguised or stylized.

The PanGenesis CEO Richard W. Knudson was also at the hotel garden table, sipping his Murphy's Rum and Coke. "Let me tell you the details of the PanGenesis workforce and our pricing plans," he offered to Matzurski. "Do you have a sheet of paper? I will explain." Fifteen minutes later Matzurski had a much clearer appreciation of PanGenesis's ambitious plans.

Matzurski leaned back and pondered the PanGenesis value proposition for offshore outsourcing: this is certainly creative, intriguing, and ambitious, but will it work? Will the program provide the apparent substantial improvement in productivity and quality at a lower cost with quicker delivery? Will the plan generate enough skilled employees? Will the plan provide the edge Costa Rica is looking for as an attractive offshore location? How many more years will it take to get the kinks out of this new workforce method?

Costa Rica – a new tech star

In 1997, Costa Rica President Jose Maria Figueres flew to California to visit Intel's headquarters in Santa Clara, California. This was an unusual visit. The president of this tiny Central American country was coming to press his case that Intel, one of the world's most important tech companies, should choose Costa Rica as the next location of its semiconductor plant.

Within a decade the Intel gamble had clearly paid off. Costa Rica was a high-tech star. Intel alone employs 5500 in the country. The other major MNC player in the country was HP, employing a similar number. Dozens of other foreign tech companies, including those in the Life Sciences, had set up operations in Costa Rica. Hundreds of indigenous Costa Rican firms had sprouted up, selling their products and services to clients in the region, as well as to North America and to Europe.

Until its rise as a tech center, Costa Rica was best known for its coffee, its bananas, its rainforest, and most interestingly, for its abolition of its standing army in 1948.

Costa Rica has only four million people and so the decade-old boom in high-tech had led to the usual high-tech labor crunch with escalating salaries. Of the labor force, there were about 7500 software professionals (or as many as 25,000 if broader assumptions are made) and another 20,000 employees in a related boom sector, call centers.

Costa Rica has nurtured good schools and universities, both public and private, yielding one of the highest literacy rates in the world. In addition to the major public universities, UCR and TEC, one of its leading private universities, Universidad Latina, has grown a number of computer-related programs that help train software professionals.

The global market for IT workers

By 2007, the global tech boom was in its second decade. Global demand for software professionals was continuing to grow in both wealthy and emerging nations. Even though global supply was growing in over one hundred nations, "labor crunch" had become a common refrain. This refrain was often accompanied by its close cousin, *turnover.* When markets are hot, people jump from job to job seeking higher salaries and perks. In India, for example, the industry expects to have a shortage of well over 100,000 software professionals by 2010. In 2007, the Wall Street Journal wrote: "India's software-and-service association puts wage inflation in its industry at 10% to 15% a year. Some tech executives say it's closer to 50%."

At the same time, the baby-boomers in Europe and the US were racing toward retirement. In the US alone, the Labor Department estimates that by 2020, there will be a shortage of 28 million people in the labor force. This baby boomer segment of the labor force entered their working careers in the 1960s to the 1980s, and comprises a significant amount of the IT professional workforce in the industrial nations today. As they leave to retire, the US and Europe would see a continuing and worsening IT labor shortage.

And so, after looking at the overheated markets in India and China, and the upcoming crunch in the US, many had turned to labor markets in Latin America to fill the void.

PanGenesis

PanGenesis is an IT Services firm targeting and servicing multinational clients. Thus, its foreign clients outsource IT support offshore (nearshore) to PanGenesis.

PanGenesis was founded in 2002 and was headed by three experienced leaders. American CEO and Founder Richard W. Knudson was an old hand in offshoring, having lived in India for 7 years, consulting to the Indian IT industry. Among his many accomplishments, Knudson was involved in early CMM evaluations in India and China. The firm's president was Jim Kamenlis, the former CIO of Xerox Palo Alto Research Center (PARC), one of the most venerated R&D centers in modern American history. Carlos Apéstegui headed operations in Costa Rica. He was a "Tico" and had 20 years of successful IT business operations in Costa Rica (a native of Costa Rica is called a "Tico").

PanGenesis's workforce and pricing scheme

PanGenesis was building several programs for tapping inexpensive but well-trained IT labor.

Apprentice program

CEO Knudson and President Kamenelis began working with the newly elected Able Pacheco government to create the apprentice programs in 2002. Working with influential people in Costa Rica and making their case directly to the President of Costa Rica and the Science and Technology Minister, Dr. Pardo-Evens, many of the elements of their program were in place in 2007.

At its core, the program would target young, economically disadvantaged students out of high school. There were many excellent students who were not funneled through career tracks for various reasons. Typically they were busy working to contribute to the family income. Only about 20% of 2500 applicants who applied to the state-funded public university Computer Science program got in. The remaining 80% were ripe for an apprentice program. In addition, Of those who were accepted into the CS programs, 60% were unable to finish. A related source of apprentices were the 450 students who finished the strong high school IT track, lasting 2500 hours. In spite of their computer prowess, many sought some form of structure in their computer career plans.

All of these students could be turned into productive software engineering professionals through the apprentice program. The student underwent a rigorous six-month training program that included: English immersion; intensive programming concepts; Configuration management using well-known software; quality assurance audits, nightly code reviews; training in documentation; teamwork, scheduling and statistical analysis. Once the training was successfully completed, the graduates would become engineering apprentices and would be assigned to support a seasoned software engineer four hours a day. This pair would act as a development team. The qualification for an apprentice is modeled in Figure CS 3.1.

The apprentice would relieve their software engineer from having to perform important, but non-engineering, housekeeping tasks that took up a substantial amount of time. This would unburden the engineer to focus on high-impact technical, software engineering tasks.

While well-trained and experienced software engineers were "charged out" at up to $30/hr, an apprentice was charged to the client at a much lower rate. PanGenesis's income for the apprentice was used in three

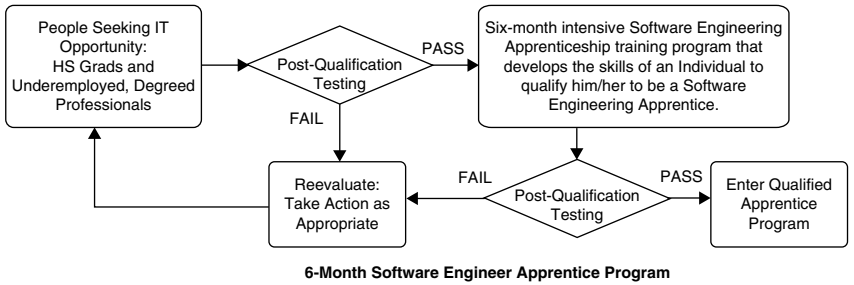

Figure CS 3.1 Six-month software engineer apprentice program

ways: (i) it funded the living expenses of the apprentice; (ii) it was used to pay the university for the apprentice's four-year university education to receive a software engineering degree; and (iii) a portion was used for under-privileged students and to support university teaching facilities and labs.

To remain an apprentice the student must pursue his/her university degree as a software engineer, maintain a high grade point average, properly and diligently perform his/her apprenticeship assignments, and commit to work for PanGenesis after graduating from the university. The apprentice worked for four hours each day, and attended the university courses for a degree in software engineering during the remainder of the time. This program was modeled in Figure CS 3.2.

As shown in the data in Appendix 1, the apprentice model allowed PanGenesis to significantly under-bid competitors while substantially reducing project and development costs and delivery times. In addition to schedule and cost benefits, the services and products received a substantial improvement in quality due to 100% code reviews and frequent quality audits conducted by the well-trained apprentices. This added value to quality and project cost was not factored into the savings already achieved by the apprenticeship model.

The first round of the student apprentice was scheduled to begin in 2007.

Tap underemployed university graduates

According to the government's estimate, Costa Rica had 47,000 university graduates who were under-employed or unemployed professionals. The Arias Government's Minister of Science and Technology, Minister

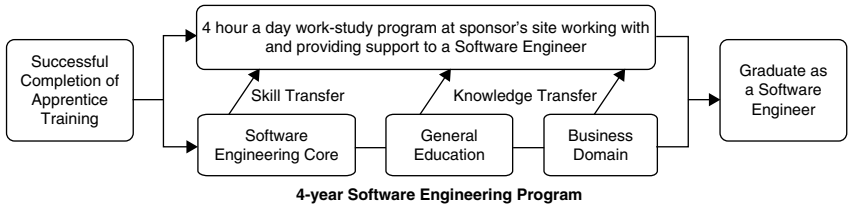

Figure CS 3.2 Four-year software engineering program

E. Flores, wanted to retrain them for IT. PanGenesis included a fast-track program for these professionals, using the apprenticeship program model. These professionals had experience in business that would add value to their role as a software engineer.

The PanGenesis program is an accelerated two-year program; it has the students working while attending the "core" software engineering courses to qualify for a degree in software engineering. The accelerated pace is based on having met prior university general education and elective requirements from the employee's previous degree. Income from the client for the graduate professional/apprentice is used in the same way as the income from the economically disadvantaged high school graduates.

Labor importation

The last element of the PanGenesis model was to build an instant, large, scalable, highly qualified engineering workforce. This was a tall task. To accomplish this, PanGenesis was augmenting Costa Rican labor with imported foreign labor (guest workers) from other nations. PanGenesis established an international IT sourcing capability hiring skilled software engineers from Eastern Europe, the Philippines, and Latin America. This initial workforce would serve clients and would be the first mentors to the apprenticeship workforce being developed.

Of particular interest to the firm was the Philippines, which had a relatively large and mobile IT professional labor pool. Its engineers are well-trained, speak excellent English, and are also familiar with Spanish.

Filipino employees would enjoy income tax exemption because they were working outside the Philippines. They would be working for an affiliate company of PanGenesis. PanGenesis paid their social security tax due on salary received in Costa Rica, and would provide them with room and board expenses.

Appendix 1: Costs/charges for apprentice-supported teams

The workday breakdown for typical engineering tasks	Hours
Core engineering work	4.0
Productive housekeeping Tasks: configuration management, code review, quality audits, scheduling, statistical analysis, etc.	2.5
Social time: Phone calls, long lunch, breaks, talking non-business	1.5

Traditional model	Metrics
Assume a typical project with the following parameters	
Total project hours	10,000
Charge rate in offshore outsourcing	US$ 30/hr
Skills needed: Engineers experienced in J2EE, web applications	5+ years experience
Number of engineers assigned	5
Effort per week	200 hr week
Duration	**50 weeks**
Total charge to customer	**US$ 300,000**

PanGenesis apprentice model	Metrics
Apprentice takes over some of the software engineer's Productive Housekeeping Tasks.	
Number of total productive hours, (1000 hrs added for apprentice management)	11,000
Apprentice daily work hours	4
Engineering rate	US$ 30/hr
Apprentice rate	US$ 9
Total weekly charge to customer of a team of eng + app	US$ 1380
Charge rate by PanGenesis (Engineers with 5+ years experience)	US$ 23/hr
Effort per week (Engineers and apprentices)	300 hr
Duration (total hours/ weekly burn rate)	**37 weeks**
Total cost to PanGenesis of team of eng+app (Hours time avg rate)	**US$ 253,000**

Source: Richard Knudson's internal time-and-motion studies

CASE STUDY 4

The giant awakens: Sheen Software Systems considers China for offshore IT outsourcing

Erran Carmel

Synopsys

This teaching case provides a practical illustration of the challenges of using IT outsourcing and evolving the IT function's structure, governance arrangements, and capabilities in a dynamic business context. A central focus is on retained core IT. The case was developed as a foundation for class discussions and learning. It is based on actual companies and events, though some details have been disguised or stylized. This case is about a small American firm exploring the possibility of setting up offshore IT outsourcing in China. The case took place in 2003. This version was created on November 20, 2003 and was updated in January 2009.

Preface

Mr. Frank Xin and Mr. Zhang Chang were ordering dinner at M on the Bund, the stylish eatery overlooking the dazzling Shanghai riverfront. "I'm bullish on China and particularly on Shanghai," said Xin. His friend, Chang, vice president of IS at a major Shanghai bank, was more careful. "Look, Xin, as a friend, I think you're taking some major risks in setting up shop across the ocean. And this stuff about lightweight methodologies seems lightweight to me."

Frank Xin goes to China

Xin made up his mind that China was where his offshore-outsourcing unit would be. He had followed the recent emergence of the offshore-outsourcing industry in China. His deliberation was only over where and what form his Chinese operations would take. He considered Shanghai because of the "buzz" and because he had some family ties in the city. "Shanghai is a good strategic point to grow," he said. And in answer to his own hesitations, he continued: "If Shanghai itself continues to get expensive, I can move to one of the nearby cities with tech parks, such as Suzhou or Hangzhou (each of which is 12 hours by train from Shanghai)."

Operations

Xin still wasn't sure how to set up China operations. He saw two options: the first was to set up his own "captive" office that would be a subsidiary of Sheen – US. The second, which he was still exploring, was to enter into partnership with an existing firm. In this arrangement he would sign an agreement with a Shanghai firm whereby the Shanghai firm would allocate some of its staff to Sheen. Xin saw advantages to each option.

If he decided to lease an office, he had a number of choices. His first interest was in the Software Park in Pudang, a newly built area in eastern Shanghai. But the facility had been at full occupancy for years. Pudang rates are very low for Shanghai at ¢55 per square meter, versus about ¢70–¢80 in the rest of the city. Being a member of the software park, even if he did not reside there, would give Sheen other financial benefits: a tax holiday in the first three years (on profits); and a 50% reduction on taxes in the subsequent five years. Xin was not sure how much profits would be allocated to his Shanghai office, though.

Xin began planning his offshore strategy by attending the Global IT outsourcing summit[1] at a an elegant hotel in downtown Shanghai, a few minutes walk from the riverfront (the "Bund"). The two-day conference was one of the first in China that focused on offshore outsourcing. It was organized by the Shanghai Municipal Foreign Economic Relations and Trade Commission, the Shanghai Municipal and Formalization Commission, the Shanghai Software Industry Association, and several other organizations.

[1] Link to conference site: http://www.cnoutsourcing.com/English/index.asp

At the conference, the vice-mayor of Shanghai welcomed the attendees with a well-prepared speech that was targeted at the forum. About 200 people attended the conference, most of whom were from Chinese software companies. Several foreign firms sent their representatives, including ADP-Asia and Siemens. Conference speeches included those by the heads of Microsoft-China, Shanda (a leading computer game maker based in Shanghai), and the CTO of Webex, an American firm with R&D in Shanghai. The summit was covered in the next day's English language "Shanghai Daily", under the headline "China's software outsourcing industry is expected to shorten its gap with India in about 3 years".

By 2003, the Chinese software market had been growing at a very fast rate for several years. Unlike the Indian industry, which most see as its main competitor, China's industry enjoyed strong demand domestically from an economy that had been growing over the previous decade at double digits CAGR. Beginning around 2000, Chinese firms began to set their sights on augmenting their domestic demand with that from foreign markets. In 2003 China was expected to export roughly US$ 1 billion in software and software services (commonly called outsourcing). The Shanghai metro area accounted for roughly 12% of the total software exports. Shanghai was home to software R&D centers for HP and Ericsson, as well as support centers and localization centers for Microsoft and other multinationals.

Xin and Sheen

Frank Xin[2] is representative of many global software entrepreneurs: as an "overseas Chinese," he is able to bridge East and West. Xin has been living in Los Angeles for 15 years where he still has his home. Having grown up in Taiwan, he is able to speak Mandarin and can be understood in Shanghai, though he is still trying to master the local Chinese dialect, he says. Prior to founding Sheen he was at Peoplesoft.

Xin founded Sheen in 2000 to provide customized solutions for the business and entertainment industries. His large clients include Disney and 20th Century Fox, but most of his clients are SMEs. In all cases, the development teams assigned to projects are small and nimble, three to six technical staff usually. Most of his clients are regional,

[2] In accordance with English transliteration norms – Xin is pronounced Sheen.

in metropolitan Los Angeles, but some have been based elsewhere in California and the US.

Sheen has four permanent employees and a dozen regular consultants/contractors brought in when needed. He runs a small lean shop that relies on the combined technical abilities and sales abilities of the principals.

Sheen strategy

"My strategy is to grow," said Xin, "... to capitalize on our strengths and the strengths of the Chinese."

In Sheen's client engagements, the firm uses its own adaptation of Agile methodologies.[3] Agile methodologies are also known as "lightweight methodologies," the most famous of which is Extreme Programming, or XP. The "agile movement" is a reaction to the "heavy" methodologies exemplified by the Software Engineering Institute's CMM (Capability Maturity Model), which emphasizes controls and documentation, both of which are anathema to independent-minded programers.

> *"We've found that most clients don't have the bandwidth to do full-blown systems analysis and design, so Agile methodologies are better suited. Agile approaches are much better suited to more and better communication between client and developers with lots of end-user participation and small, nimble teams of developers. By working closer with the developer, the client gets over the xenophobia of working with the foreigner, the unknown."*

The other part of Xin's strategy is to utilize the strength of the Chinese. While the Indian outsourcing industry has mastered the factory approach of software production, the Chinese software industry is only slowly following that lead, and perhaps reluctantly. About 20 Indian firms have attained the highest processing standards of software development, the CMM Level 5. India's success is all the more noteworthy because its firms represent roughly 50% of all global firms who have attained this standard.

> *"When we bid against CMM Level 5 Indian firms, how do we beat them? We have to offer something different."*

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[3] For more on the strange marriage of "Agile Methods" and software development over distance (discussed in Chapter 9 of this book) see the following link: http://www.sdmagazine.com/ documents/s=7556/sdm0209i/sdm0209i.htm?temp=snsjALfT4Q

Chinese programers, on the other hand, are educated in computer science programs with a tradition of theory and algorithm development. Students coming out of this educational system are not interested in working in factory environments in which they are handed specifications. They want to work with the customer to solve problems.

> *"Agile programming is a much better fit to Chinese work culture than the stifling procedures embedded in the CMM,"- Xin.*

One of the cornerstones of agile methodologies is very tight teamwork and very tight interactions between client and developer. Sheen's approach to teamwork is to place people at the client site for as long as possible. Sometimes this can reach half of the project duration. When the client wants the team at their site for longer periods, this adds to the project cost. Sheen passes the cost on to the client.

> *"In China, everyone wants to be their own boss, people are less conformist, so when you use Agile methods, you allow everyone on the team to give feedback."*

Xin was convinced that China is the location to launch his ideas and to offshore his services. His reasoning relayed on the characteristics of the local market and domestic and international market opportunities (see Appendix A). But is he right? Can China deliver on his expectations? Would there be a better location for his line of services? Or maybe he should keep his operations onshore? How should he set up his services in the offshore location of his choice?

Appendix A – Sheen: our focus is on systems integration services

Sheen's core areas of competencies are as follows.

- Object oriented analysis/design and programing using UML and J2EE
- Relational database design using Microsoft SQL Server, Oracle, and Sybase
- Managing architectural design using XML and related technologies

We provide the following services:

- Systems integration
- Software architectural design
- Custom programing
- Technical training
- Best practices consulting

Our clients are in these categories:

- Fortune 100 entertainment corporations
- Major software providers
- Online retailers

Source: Sheen Web page, late 2003

CASE STUDY 5

Managing strategic IT-based outsourcing projects: The CLASS case in financial services

David Feeny and Leslie P. Willcocks

> *"The IBM solution is recommended because the higher risk of delivery is outweighed by the potential to provide Norwich Union with greater competitiveness in the Life and Pensions Market"* – Roger Taylor, October 1994.
>
> *"It should have been the perfect partnership"*– Roger Taylor, June 1996.

Synopsis

In December 1995, Philip Scott – General Manager of the Life and Pensions (L&P) business of Norwich Union (NU) – presented to his colleagues on the Group Board a progress report on the implementation of L&P's business systems strategy. He was able to note a number of major achievements:

- under the restructuring and re-skilling plans instigated by Roger Taylor, L&P's Head of IT, staff numbers had reduced by 40% but productivity had more than doubled;
- the rollout of Image technology, part of the wider Client Administrative Service Systems (CLASS) project, had been successfully completed

ahead of schedule and NU was now believed to be the largest user of such technology in Europe;
- development of L&P's client server / communications infrastructure had also made excellent progress and was similarly expected to reach completion ahead of schedule.

However, another component of the CLASS project had experienced major difficulties. L&P's executive management now had little confidence that the attempt to replace existing policy management systems with a new generation based on IBM's Insurance Application Architecture (IAA) would succeed on anything like the planned timescale. Scott asked for and received his colleagues' agreement to exercise the escape clause within NU's contract with IBM. He informed IBM UK's Chief Executive, Barry Morgans, of NU's decision in a letter dated December 11, 1995.

As he reflected during the coming months, Scott became convinced that there was important potential learning from the successes and disappointments of the CLASS project for both NU and IBM. He asked Barry Morgans if IBM and NU could cooperate in the creation of case study material which would enable this learning to be achieved.

Business background to the CLASS project

From its early origins in 1797, the Norwich Union Life Insurance Society became established as one of the three largest providers of life and pensions products to the UK market.[1] Its business history reflects the wider pattern of the industry, which for decades could be characterized by words such as "stable," "cautious," and "gentlemanly." Government rhetoric and legislative changes in the 1980s then prompted sudden extraordinary growth, fierce competition, and upheaval in distribution channels. NU's premium income from life and pensions quadrupled between 1985 and 1991. However, widespread allegations of industry mis-selling damaged consumer confidence and led to a difficult five year period. In NU's case, UK premium income fell by nearly one-third in 1992, and in 1995 was still 24% below its 1991 peak.

Renewing the sales growth was not the only – or indeed the most pressing – problem which Philip Scott faced in July 1993, when he moved

[1] With premium income of more than £2 billions, UK Life and Pensions is the largest business of the Norwich Union Group. The Group had more than £40 billions in assets under management in 1995. It includes a major UK General Insurance business, with 1995 premium income of £1372 millions, and smaller businesses operating in life and general insurance markets beyond the UK.

from being Group Finance Director to General Manager of UK Life and Pensions. During the heady years of market expansion, many new and complex products had been launched without sufficient regard for their administration needs over what might be decades of active life. As support systems creaked and staffing soared to fill the gap, the 1980s created a legacy of high costs and poor client service.[2] In Scott's view the business need was for transformational change, to achieve radically different levels of cost, service, and time to market. The L&P management team (see Appendix A) formally embraced the language of business transformation, and it was in this context that the CLASS project was conceived and adopted.

IT background to the CLASS project

While the businesses needed IT support for its transformational agenda, it was clear to Scott that the IT function itself was in need of urgent management attention. Until recently IT had been almost entirely centralized, operating as a support service across NU's constituent businesses. The familiar dissatisfactions with this sort of arrangement – high costs and lack of responsiveness – were being strongly voiced at the beginning of the 1990s, and a review by Coopers and Lybrand led to adoption in 1993 of a "federal" IT structure. L&P now became responsible for its own systems development needs, and more than 400 IT staff were transferred into the business. However, changes in organizational arrangements could only be a first step in the achievement of more effective IT support. Scott perceived that when he took over as general manager "our IT was just not delivering, and the cost was going up exponentially." In January 1994 he brought in Roger Taylor and gave him "quite a simple brief. ... to double productivity in 12 months."

This was not the sort of brief to daunt the new IT Head, whose previous career included 13 widely travelled years in BP. "I'm not your typical technically driven IT man" explained Taylor, "I am essentially a businessman. My style has always been to hit the ground running, play things straight down the line, no politics, say it as it is. Basically I am a trouble-shooter." He quickly set up five major initiatives, four of which addressed the inherited operational problems:

- to improve relationships and create business/IT partnership, support teams were set up, aligned to each department, to handle day-to-day activity and minor systems enhancements;

[2] L&P's products were sold to consumers primarily through thousands of Independent Financial Advisers (IFAs). Hence client service involved response to both IFAs and direct consumer contacts.

- to improve delivery track record, any development requiring more than six man-months of effort was transferred into a formal development team and subjected to "full project management disciplines";
- to eliminate demarcation and overmanning, the myriad existing job profiles and descriptions were scrapped and replaced by simplified professional and managerial profiles with a three level structure;
- to enhance development productivity, a client-server environment was introduced, to largely replace NU's traditional mainframe orientation.

Building on the achievements of these initiatives, Taylor "downsized" the IT function by around 40% in January 1995, without loss of momentum. While total cost reduction was less dramatic (some contractors were employed to introduce new skills) the measures in place demonstrated that Taylor could claim to have largely fulfilled his initial brief.

The fifth initiative, which took place in parallel with all this activity, was to develop a forward systems strategy which was truly aligned to the needs and priorities of the business. By the middle of 1994, a small group of Taylor's senior people put together a three phase strategy designed to fundamentally change the systems support provided to the business.

The re-skilling and re-positioning drives represented by the first four initiatives comprised one component of Phase One of the strategy. In addition Phase One embraced a number of major new developments. The Continuum Company's Life 70 package would be replaced by a new "contract engine" to support the management of existing and future policy products. A "Client Repository" data warehouse would be created to enable customer-based rather than policy-based service. Call Center and Electronic Data Interchange (EDI) technologies would be introduced to transform the existing means of communications between customers, distribution channels, NU branch offices and the center. In combination these developments would provide the required breakthrough in L&P's ability to provide high quality service at low cost for existing products, and to rapidly launch and support new products. Phase One also envisaged replacement of L&P's current finance and accounting systems by package based products.

Outlined in more general terms was a Phase Two of the strategy, starting in 1997, in which other existing "legacy" systems would be replaced. And a Phase Three which would identify and address aspects of L&P's business which were currently unsupported by IT. (See scope of the CLASS project in Appendix B).

In agreeing to adopt the strategy, the L&P Board recognized that extensive use of external resources would be required to achieve the new

development components of Phase One. The search began for suppliers who could work with NU to achieve these components on the aggressive timescale which the business required. (See principal milestones and timescale of the CLASS in Appendix C).

Selecting suppliers for the CLASS project

Although the general market for IT products and services is very large, the systems support needs of life and pensions businesses have long been recognized as specialized and demanding. This is particularly emphasized in the UK, whose financial services providers have led the large-scale introduction of complex and sophisticated unit-linked investment products. As a result, NU approached just three suppliers with initial requests for information – the Continuum company, IBM, and Oracle. Continuum in 1994 was the established specialist in the sector, and indeed held an almost monopoly position as provider of policy management systems for the life and pensions market. NU had been a major customer of Continuum since 1985, when they installed the Life 70 package as the "contract engine" to support L&P's first unit-linked products. Interestingly even in 1985 Life 70 was seen as an interim solution. From 1985 through to 1994 NU joined with other life companies in providing funds for the development of Continuum's target successor package, CCA2.

NU was also a major and long established customer of IBM, but principally for that company's mainframe range of products. In 1994 IBM was going through its own process of transformation, adapting to the major changes which had occurred in hardware and software markets, and the emergence of a large and growing market for IT services. NU already had some involvement with the IBM business unit which now focused on creating products for the insurance sector. In contrast to Continuum's package-based approach, this IBM unit was developing an Insurance Application Architecture (IAA) which they believed could be the basis for rapid development of bespoke policy management systems. IBM also had a well-established position in imaging technology, and was perceived to possess strong project management skills.

In evaluating responses to their request for information, NU found confirmation that both Continuum and IBM were obvious candidates as potential suppliers. While Oracle was a large and respected supplier of software to the general market, they were seen to lack the ability and inclination to provide the envisaged project leadership, and were excluded from further discussions.

A formal Invitation to Tender (ITT) was issued by Taylor to Continuum and IBM on August 4, 1994. It ran to more than 200 pages and addressed the context and scope of L&P's requirements, the form of response to be provided and the proposed contractual terms. All Phase One developments from the business systems strategy were included, notably the provision of a new contract engine to replace Life 70, imaging technology and workflow management, client repository and call center capability, outbound communications infrastructure. While it was made clear that significant numbers of NU staff would be provided to the development team, the ITT called for responses on a fixed price basis with the supplier taking full responsibility for the complete project on a turnkey basis.[3] Required completion dates were defined for each component of development, ranging from 9 months for imaging/workflow management support, to 30 months for migration of all products to the new contract engine. Payment schedules would be linked to these completion dates, and therefore to the realization of business benefits by L&P. Initial responses to the ITT were required by August 30. After further discussions with NU staff, both suppliers made their final submissions on October 12.

In a number of respects L&P Board members found there was little to choose between the two submissions. Both represented total external costs of around £30 millions, with no significant differential. Each supplier was seen to be well able to deliver three components of the solution – imaging/workflow management, client repository/call center, outbound communications – either directly or through use of agreed subcontractors. Discussion centered therefore on the requirement for a new contract engine, an area where neither bid was seen to be wholly convincing, but for quite different reasons.

Continuum's CCA2 was already seen to possess 60% of the functionality required and the company undoubtedly possessed extensive experience, understanding, and skills in the insurance industry. On the other hand, after more than ten years of development of CCA2 the package still fell well short of NU's needs, and Continuum was known to be in some difficulty with meeting commitments to other major insurance companies. L&P executives were also concerned that the outcome of a decision for Continuum might be a cumbersome all-embracing package which was closely controlled by the supplier. NU might face future disadvantages such as high ongoing supplier costs and lack of systems flexibility.

[3] Suppliers could also volunteer alternatives to a fixed-price approach that "would facilitate greater opportunity for sharing the risks and rewards associated with a project of this scale."

The IBM position was almost a mirror image. Their contract engine solution was based on a new approach, the use of IAA to rapidly drive out systems requirements and turn them into new code. Yet little was known of IAA and IBM refused to provide details to protect their intellectual property. There were also strong concerns that IBM, lacking in-depth knowledge of the life and pensions industry, had seriously underestimated the size of the task. But if IBM did deliver it was clear that NU would have taken a quantum leap forward and would be in a position of competitive advantage for years to come. There might even be new revenues for NU through operation of administrative services for other life companies. As one senior NU staffer colorfully described it, it was like a choice between an experienced but ageing lady of the night and an 18-year-old virgin.

Two further considerations weighed heavily in the minds of L&P executives, and influenced the final outcome. First, they were all conscious that NU had provided Continuum with development funding for the past ten years, with little to show for it. Did Continuum deserve a new vote of confidence? Second, IBM were seen to be very highly motivated. Their insurance business unit was desperately keen to break into the market in a major way, and saw the NU project as the available springboard. In addition, the IBM bid had the personal backing of Javaid Aziz, IBM UK's charismatic Chief Executive. Aziz was quoted as saying that "Not winning the business at Norwich Union will hurt IBM. But winning and then not delivering it successfully will harm us enormously." L&P executives reasoned that, while the IBM solution was high risk, the company had the technical and project management resources to get them out of trouble, and the management commitment to deploy them when necessary. IBM became the preferred provider.

Contracting for the CLASS project

The task was now to achieve a satisfactory contract between NU and IBM for completion of the CLASS project. A number of risks had been identified – and Insurance companies are alert to managing risks. The contract formalized IBM's responsibility for overall program leadership, and delivery of all components within the fixed price submitted. Milestones were defined for each strand of development. The first major milestone in development of the new contract engine was that detailed requirements should be created and agreed with NU by September 1995. Payment schedules were detailed, with the first payment becoming due in January 1996 on completion of the image/workflow management system. There were

provisions for liquidated damages to be paid on late completion of any deliverables.

In addition the contract contained a termination clause. NU had identified three related risks in the IBM solution: IBM lacked experience in the life insurance industry; which might have led them to underestimate the complexity of NU's products and systems needs; which might in turn result in substantial project overrun. Taylor believed it could be mid-1995 before IBM understood the full scale of the project. He talked through with his colleagues a scenario in which they were nine months late in delivering the new contract engine. It was agreed that the contract should provide for re-examination of delivery schedules in the final quarter of 1995, after the detailed statement of requirements had become due. If the prognosis was for a delay exceeding six months, NU could cancel the entire contract without penalty (and before the first payment became due). NU would retain rights in the requirements specifications developed, and would be in a position to exercise a fallback option with either Continuum or Oracle.

These tough contract conditions, although agreed in principle by IBM before the October decision, took some weeks to negotiate in detail. A particular setback was the sudden resignation from IBM of Javaid Aziz. However, his successor as Chief Executive, Barry Morgans (formerly Finance Director for IBM UK), reaffirmed IBM's commitment. With negotiations complete, there was a formal contract signing ceremony in February 1995.

CLASS project set up

In parallel with the contract negotiations, IBM was working hard to set up their project team.

In November 1994 they appointed John Goble as Programme Director. Goble was by background an accountant with more than 20 years experience in IBM. He had been increasingly drawn into systems activity, and during the 1980s had been the business-side leader of a project to implement some common financial systems in IBM world-wide. For two years he worked on a task force looking at the re-structuring of the IBM UK organization. He had gone on to be the company's supply operations manager, overseeing the introduction of new systems and processes which had resulted in radically improved business performance. Goble saw the CLASS project as an opportunity to help achieve for a major IBM customer the sort of systems-led change he had managed in IBM.

Goble's key technical manager for the project was also identified in November 1994. Kenny Lister was a career IT professional with a dozen years in IBM. He had built his career within IBM's own internal systems department, following the familiar progression from programmer/analyst, through systems designer and group leader to project manager. As IBM built its presence in the emerging IT services marketplace, Lister was one of those who had moved to work on projects for IBM customers. Within the CLASS project Lister became responsible for almost all of the systems development work. The imaging technology component was set up as a separate sub-project under IBM's David Gibbs who also reported directly to Goble (see Appendix D for CLASS project organization).

NU's own direct involvement in the project was to be led by Peter Hardy, one of many senior managers whose whole career had been with the company. After training as an actuary, he now had 25 years experience of the industry and a particular knowledge of policy administration. In the second half of the 1980s he had project managed the launch of NU's new series of pension products, and gone on to build and manage the 800-strong organization which supported the administration of those products. Hardy now had two roles within the CLASS project, to which he was assigned on a full time basis. Reporting to Goble, he was involved in the logistics of setting up the overall project, and was specifically responsible for the supply of NU resources to the project – including the 20 plus senior business people who were to work full time with IBM on development of the detailed business requirements. In his other role, reporting to L&P's Client Services Director Nick Smith, Hardy effectively signed off on behalf of Norwich Union the achievement of each phase of specifications.

Apart from Hardy, NU seconded three other managers to the project. With his combination of actuarial skills and work on the Life 70 System, Kevan Fogg was seen as NU's leading authority on policy management systems – one of the few who understood the full internal complexity of such systems. He and Dick Ong from the Finance Division were designated consultants to the project. In addition, Matt Fahy from Business Systems Division took up a line management position, responsible to Goble for data migration and systems interface aspects of the project.

As project resourcing began to build up, the decision was made to bring the team together within an existing NU facility – Norvic House, a few minutes walk from NU's Head Office. All secondees to the project moved in, apart from a small group working on further development of IAA in Brussels. At the project's peak there were around 200 project staff in Norvic House of which about 120 were employed by IBM.

Governance represented the other strand of project set up. Philip Scott and Javaid Aziz (subsequently Barry Morgans) were designated Executive Sponsors of the project, with overall responsibility for ensuring that each company met its commitments, and for arbitrating on critical issues. Nick Smith became the Business Sponsor. As L&P's Client Services Director he was the line executive most directly affected by the project, and the obvious person to maintain its business focus through to achievement of benefits. The nature of Taylor's involvement in the project changed radically at this point. Whereas Business Systems Division had been driving the initiative prior to contract, IBM now held full responsibility for CLASS development and implementation. Taylor took up responsibility for quality assurance of the project, a role for which he felt that he and his staff were better positioned than a third party could be. A Steering Group was formed, to meet monthly under Smith's chairmanship. In addition to Smith and Taylor, its members included two other L&P executives – Finance Director Geoff Shaw, and Sales and marketing Director Tom Kelly. IBM were represented by one of Morgan's Directors, Stuart Rangeley-Wilson, as well as by Goble. Hardy acted as secretary to the meetings.

The CLASS project in action

By January 1995, all the key players were in place and the project was well underway. It was clear to everyone that they had embarked on a major and complex undertaking with challenging deadlines. But both NU and IBM stood to benefit hugely from a successful outcome, leapfrogging their respective competitors, and establishing advantage for years ahead. And it was accepted that tight timescales should stimulate and bring the best out of all concerned. The only irritant at this stage for members of the project management team was that the finalization of contract details was prolonging a rather adversarial climate and diverting their attention from the task in front of them.

Unfortunately as soon as contractual negotiations were finally out of the way the first signs of deeper problems began to emerge. In late February IBM produced their "analysis stage plan" to produce detailed business requirement for the new contract engine, and Fogg and Hardy refused to sign it off. As far as they were concerned, the fact that IBM was scheduling such a "ludicrously small" amount of resource for the work confirmed their worst fears that IBM had seriously underestimated the scale of this part of the project. The argument about scale became the first of four issues that dogged project progress over the coming months.

The relatively relaxed response of IBM to NU's concerns about scale was largely explained by their position on the second issue, the role of IAA. NU's staff were all accustomed to a traditional and time consuming approach to generating detailed systems requirements. IBM's bid, on the other hand, had always been based on the belief that IAA could be used to very rapidly and efficiently drive out requirements in the course of structured workshops with users. IBM managers reminded their NU counterparts that IAA represented a radically different approach, a new mindset which was the basis for their own confidence. But in practice these reassurances failed to take root. User members of the project team reported to Hardy that the initial workshops were a very frustrating experience. They found the IAA-based approach very theoretical, generic, and high level. And when in March Fogg came back from a trip to the IAA development team in Brussels, he was less convinced than ever that the IBM approach was viable. The IAA debate was to prove a lengthy and crucial one.

* * *

Trying to resolve these first two issues, Lister pulled together a small working group of his most technically able people. His aim was to define for the contract engine development an overall methodology which commanded everybody's confidence. IAA would be a part of it, but not the whole of it. The need for some more traditional process decomposition work was now recognized. New estimates were made for the analysis stage plan.

At the Steering Group meeting held on April 21, Goble and Lister reported that the new analysis work was expected to require an additional 20 man years of effort – with obvious major implications for the cost and timescales of the project. Steering Group members reacted in a variety of ways:

- For IBM, Rangeley-Wilson wanted discussions to apportion costs of the unplanned work between IBM and NU. He also emphasized the importance of avoiding unnecessary complexity and suggested the Steering Group should have a role in containing user requirements. He was reminded that NU's position had not changed from that stated in the ITT. IBM would be expected to step up to its responsibilities.
- Taylor was concerned that the potential benefits of IAA should not be lost through the new approach. NU still required a consistent systems architecture and low-cost technical platform.
- Smith emphasized the need to reassure NU that IBM really had now identified a sound methodology for capturing the detailed business requirements. Lister was asked to demonstrate the proposed new process within the next two weeks.

The meeting agreed that the priority was to ensure that the program was put back onto a firm footing through the current re-planning exercise.

* * *

Further concerns surfaced in May with the quality assurance report submitted by Taylor and his team. While recognizing the excellent progress being made in some parts of the project – notably Image – the report included around 50 required action points. It was particularly critical in the project management area, highlighting the lack of clear project plans and the need for a more hands-on style of project management.

While various NU managers expressed it in different ways, it seemed clear that project management had by now become a third critical issue. For example

- According to Hardy there were "plans that ran into pages and pages; you could paper the walls with them but they told you nothing. ... The planning activity was purposeless because there was not agreement in terms of what should be done."
- Smith summarized Goble's strengths as "knowing where to find resources in IBM and understanding how to work the IBM system to obtain them. He was the orchestrator of his team with a loose rein on the activity." As the project's difficulties increased, Smith argued that a more performance-driven style was called for.

Taylor's QA report further served to escalate concerns about the project, and Scott started to attend Steering Group meetings.

* * *

The problem of escalation to achieve conflict resolution could be considered the fourth main issue of the project. For several months there had seemed to be very little progress in the main strand of the project. There was continuing uncertainty about the true scale of the effort required; the IAA debate was getting still fiercer, with opposing views increasingly entrenched; NU were steadily losing confidence in the program management regime IBM had established. How could these issues be resolved?

The Steering Group was the obvious forum for resolving key issues, but it was experiencing difficulties in exercising this role. The first problem was lack of clear information. As Kelly commented, "There were large numbers of people, nobody could argue that bodies were not actually being put to the job. But there was frustration in terms of what the output was, and the difficulty was finding out why the output was not as great as it might

have been." This difficulty was compounded by the fierce but technical nature of key debates which made it hard for Steering Group members to engage. And finally there was Goble's personal style which emphasized reassurance, characterized by Kelly as "we are getting there, things are moving, trust us, etc." As Steering Group chairman, Smith was well aware that, if NU executives overrode such re-assurance and demanded that IBM make specific changes, they might prejudice the company's ability to make future claims for liquidated damages.

Nevertheless something had to be done. It seemed that the IAA issue was the single most fundamental one. It had become increasingly clear to NU management that disagreements were not just between NU and IBM on this issue, there were strong differences within IBM. The small number of staff seconded from IBM's insurance business unit remained passionate advocates of IAA and its role in the project. On the other hand, Lister and the majority of IBM-ers in the development team had no experience of IAA prior to the project; they belonged to the software development business of IBM UK. While obviously committed to the IBM contracted approach-based on IAA, they were in fact more familiar with the traditional development approaches known to NU staff. Furthermore, given the difficulties experienced in persuading IBM-ers to move to Norwich, more than half of those employed by IBM on the project were subcontractors – clearly without prior experience of, or commitment to, IAA. NU members of the project team were very frustrated that a few IBM-ers, mostly based in Brussels, were holding out for an IAA-based approach which – in their own opinion – had lost the confidence of the great majority of project staff.

Until the argument about the role and effectiveness of IAA was fully resolved, the central component of the CLASS project was more or less paralyzed. Taylor was further convinced that unless CLASS was based on IAA it could not support NU's future business objectives. In this view he was supported by Kelly who consistently argued that there was no point creating a "state of the art legacy system." Only an IAA based solution could be expected to transform NU's ability to get new products to market in the way Kelly wanted. Taylor flew to Brussels to personally brief Larry Hirst on the critical status of the project. Hirst agreed that his IAA "guru," Mia Van Straelen, should join the Steering Group and be increasingly available to the project.

The second attempt to resolve IAA's role in the CLASS project climaxed in a fierce debate between Van Straelen and Fogg at the Steering Group meeting of July 20. It was described by Scott as "the ultimate challenge of the gladiators." After an adjournment while Van Straelen, Fogg, and Lister retired to address Scott's demand for an agreed way forward, it seemed that progress had been made. But once again the issue refused to go away. Neither of the gladiators had perished.

Taylor now focused on the project management issues, demanding that IBM get a more effective regime in place. At one point he even volunteered to take over the project direction himself, taking leave of absence from NU. In September IBM brought in a consulting/audit team, headed by Jonathan Dicks. Their brief was to provide an authoritative statement of the status of the project.

Dicks's team reported at the end of October. A series of top level meetings followed, including one between Hirst, Morgans, Scott, and Smith. A number of decisions were made:

- Dicks would formally take over as program director, succeeding Goble. It was agreed on all sides that he provided exactly the hard-driving hands-on project management style which NU was now seeking.
- The Image sub-project continued to be in excellent shape and would be carried through to completion under existing management arrangements.
- Based on recent work led by NU's Dalton-Brown, a new and effective way forward had been identified for the Client Repository/Call Center component. It would now be pursued under NU management.
- Outbound Communications represented another module to which IBM could add little value (it was largely sub-contracted). It would also now come under NU management.

While the new program director's focus was clearly the contract engine module, and his ability was respected, doubts persisted in NU about the real status of IAA and its suitability for their needs. Scott took himself off to Brussels (he was by now devoting half of his time to the CLASS project) determined to make his own assessment of IAA. In order to break the deadlock he devised what became known as the "spoon test."

> *"It had become clear that the development of IAA was nowhere near as advanced as we (or IBM) had thought, and basically the solution was to move to more of a pilot mode. My expression was to try and get them to build me a spoon, because if their mechanized approach of producing systems could actually produce me a spoon then I believe it could be cranked up to produce the BMW I wanted. But at that stage they could not actually produce a spoon."* – Philip Scott.

* * *

Meanwhile a deadline loomed. If NU wished to exercise the termination clause of the contract, it had to be done before the end of December. It was clear that the Image sub-project would complete successfully by January, and major payments would be due to IBM.

Taylor was quite clear that NU should terminate the project. It was beyond dispute that IBM had missed contractual milestones for developing the new contract engine, and that they stood no chance of completing within reasonable distance of the original schedule. The contract had been carefully devised to protect NU from precisely this eventuality. Millions of pounds were at stake.

His colleagues were less sure that this represented an appropriate and sufficient course of action. Apart from concern about the inevitable damage to the relationship with IBM, they argued that they (and the Group Board) would need convincing reassurance that there was an alternative way forward for the business. Taylor and his staff devised an approach based on some re-engineering of the existing Life 70 package. He drew the analogy of extending the life of a car by re-boring the cylinders or putting in a reconditioned engine. Re-engineering Life 70 would allow the business to be supported for a further period until IBM had proved their IAA approach, or a new contract engine package emerged from Continuum or elsewhere. IT re-skilling and business process re-engineering had already halved the time to launch new products. Further re-engineering could halve this again.

Ultimately the decision to recommend termination of the contract fell to Scott. It was, he said, "a pretty lonely single decision. I had Roger Taylor whose view was that we should cancel. I had my business people saying we had invested so much in IBM we should negotiate with them some appropriate way forward. Not least I had to face the Group Board – and tearing up a contract with IBM is not necessarily conducive to career advancement. But I took the view that it had become too high a risk for the business to stick with this horse. I did not think the horse had the capacity to win the race."

On December 8, 1995 Scott recommended to the Group Board that the CLASS project contract be cancelled. His recommendations were accepted and he wrote formally to Morgans on December 11.[4] It was a traumatic moment for all concerned. (See sequence of project events and original milestones in Appendix E).

Reflections on the CLASS projects

Reflections of NU managers

Interviewed in the summer of 1996, the NU managers most closely involved still had clear memories of the events of the CLASS project. They were

[4] Within the final settlement agreed (the details of which remain confidential) NU provided a small amount of funding for six months development work on IAA – basically to continue the "spoon test."

also ready to volunteer some reflections on what had happened and what might have been.

Probably most directly affected by the outcome was Roger Taylor, instrumental in the birth, life and death of the project. Taylor was still keenly aware of the project's original promise: "NU and IBM had a mutual need within the market. We needed a new policy administration system, and they needed an insurance company to develop one with. Strategically we shared a common vision and a common goal. It should have been the perfect partnership."

All were conscious of positive outcomes from the project. The most obvious examples sprang from the introduction of imaging technology. Kelly and Smith both explained how this had enabled a radical and highly successful re-organization of NU's branch and service unit operations. It was now possible to move work to people in a very flexible way. Smith also stressed how the introduction of image had helped him to re-motivate and re-invigorate the staff of Client Services Division, giving a psychological boost to a workforce that had been under the hammer. Kelly was confident that the ongoing introduction of call center technology would enable another tremendous move forward in NU's service to clients.

Both Kelly and Smith also stressed positive outcomes of CLASS that were less obvious. In Smith's words the challenge and momentum of CLASS, while in some ways distracting management attention, had also served as "a catalyst for many of the other things that we moved forward." Kelly gave a specific example. While CLASS had failed to achieve the hoped for revolution in time to market for new products, it had certainly stimulated a re-engineering of the process which had foreshortened previous timescales, and had raised awareness of the continuing importance of new product introduction.

When questioned about what might have been done differently, there were several references to the generation of business requirements. Taylor had hoped for a more proactive approach here by NU staff within the project. Shaw and Hardy both felt strongly that the creation of detailed requirements should have been the formal responsibility of NU, not IBM; and they should have been created before the start of the project.[5] IBM would then have had a clear start point and would surely not have underestimated the scale of the project. There was also some questioning of the role of Business Systems Division. Hardy believed that BSD had too dominant a

[5] Subsequent to CLASS cancellation Shaw had sponsored an in-house project to document the requirements. It had consumed about 50 man months of effort, and had recently completed successfully.

role in the creation and management of the ITT. Shaw on the other hand suggested that BSD should have been more directly involved within the CLASS project team – perhaps even taking lead management of the project. Adopting the QA role had prevented BSD from making their proper contribution to the project.

Kelly drew attention to the cultural clash within the project, first in respect of the project team: "In suddenly bringing together 200 people from two different cultures – expecting them to work together, understand each other, share a single vision and view – we were probably expecting too much in behavioural terms. It was unnatural." He felt the same issue complicated and detracted from the NU/IBM management interactions: "IBM had a belief in their system, and if you like they stayed at almost a superficial level in defending it. They said, trust us, it will work. We kept saying prove it to us. Now insurance companies are notorious for being conservative, traditional and detailed; I was not sure at the time whether we were just being awkward and bloody minded. I suppose I had more belief in what IBM were telling us because I could just see our people looking to dot every "I" and cross every "t", build this state of the art legacy system which I was against. I don't think there was a meeting of minds."

The choice of IAA as a basis for contract engine development was not regretted in general. All were conscious that the Continuum alternative was still deficient for their needs. With due acknowledgement to hindsight, Shaw believed that NU could have discovered more painlessly that there was no silver bullet solution if they had spent more time with IBM prior to contract. Ideally the "spoon test" should have come first. Fogg had doubts that there would ever be a silver bullet solution. As he explained, all the rapid development techniques which had captured attention in recent years assumed relatively simple systems requirements, the sort of needs which could be contained within the head of the individual. These approaches were simply not appropriate to the development of a life insurance contract administration system where "it takes me and my team weeks to sit down and think through the detailed algorithms and mathematics we need to use." NU now faced a significant period of reliance on Life 70 with concerns about functionality, responsiveness, high operating costs, and declining technical support. They were working on front-end software to create the appearance of superior client service through what Smith called the "Wizard of Oz effect – the awful mess is all behind the curtain."

Finally there were comments about the contract which had so effectively transferred project risk to IBM. Were there nevertheless some disadvantages resulting from the arrangements? Hardy believed that relationships were undermined to some extent within the project team, and this had

been particularly unhelpful in the critical second quarter of 1995. Kelly pronounced himself a convert on this point, his early concerns about damage to relationships having been outweighed by the commercial benefit to NU. Shaw and Smith both pointed to an insidious temptation: if the contract afforded comprehensive protection, and the supplier had the confidence to step up to it, executives could easily be sufficiently reassured to turn their attention to other things.

Taylor had no doubts. NU had experienced a text book example of risk assessment, contract negotiation, and contract management. Obviously he was disappointed that the full project could not complete successfully, but his years in the oil exploration business had taught him to think in terms of sunk costs and drop dead dates. Was this brand of tough commercial management part of the important learning for NU generally, as the company moved into an ever more demanding environment?

Reflections of IBM managers

Interviewed in summer 1996, IBM managers closely involved with the project made some further observations on their experiences. The purpose was to establish learning points for running projects like CLASS.

All made comments on the contract IBM had signed. John Goble felt that 80% of the problem had been in the pre-contract stage, the rest being down to the requirements phase. All agreed that it would have been exceedingly difficult to deliver the project, as contracted for, in two years. Jonathan Dicks questioned the value in having a contract that protected NU but was unlikely to achieve NU's wider business objectives. Both he and Eddie Keal also saw a weakness in the contract, which did not distinguish in the customary way between definition of contractual terms and schedules of responsibility. A consequence was that they and the IBM team had found it difficult to understand the scope of their responsibilities and what "full programme management responsibility" really meant.

There was general agreement that IAA was a powerful model but had probably been oversold both within NU and IBM. Goble felt that it was not at the state it needed to be for CLASS to meet the fixed timeframe. Lister confirmed that there was a real population exercise that had to be done: "I certainly went into the exercise believing there was more detailed analysis and business rules within IAA than eventually turned out to be the case. And I believe NU probably went into it on that belief as well." However IAA was not the problem, "more how we used it and exposed the user population". Patrick Mason endorsed this and pointed out that IAA was

a business model that allowed insurance companies to look differently at how they structured their business systems; it was never going to be a substitute for doing good application development work. On that he felt that in CLASS IBM should have defined aggressively and early the tool sets that would have worked comfortably within an IAA environment. This was not helped by the "woolly" requirements in the ITT – "not something you could easily build application specifications for".

The nature of the contract, and the over-optimistic expectations of IAA's role in driving out detailed requirements, were both seen as factors in IBM's difficulties with requirements analysis. Lister had expected "a management system within NU that brought requirements to the table in a form to which we could apply analysis and rigorous modelling techniques". Keal pointed out that IBM had neither the access to Life 70 documentation (intellectual property of Continuum) which could have enabled reverse engineering of requirements; nor the in-house actuarial skills necessary to generate them afresh. They were dependent for actuarial experience on project staff from the NU side, and he perceived these staff to have held back from proactive involvement because they saw requirements generation as an IBM contractual responsibility. An additional concern for Goble had been that businesses processes were being re-engineered, outside of the CLASS project, in parallel with the requirements analysis. These, and other issues, should all have been identified and addressed before the contract and project timetable were finalized.

Keal noted the customer's view that Aziz, had he stayed, would have made some difference because he would have given the project a stronger world-wide development and investment profile within IBM. This might also have pushed more NU managers into resourcing and worrying about CLASS as an investment project, rather than focusing on staying within contractual bounds. For Lister the fact that many NU managers did the latter was a matter of culture rather than personalities. Colleagues agreed that Goble's style was not that of a "Rotweiler project manager". However Keal pointed out that: "there's no way Roger Taylor or Jonathan Dicks could have delivered the project within the timescale using a traditional approach or traditional methodology. You do need a different way of doing things, or you'll just do a big project for four or five years and you'll end up with Life 70 in colour".

There were a number of points about the "bigness" of the project. Goble and Lister found CLASS turning into something a lot bigger than they had anticipated. Lister's learning point was that perhaps "there are no short cuts to a really big, really complex technical solution". Dicks felt that "big projects require big project skills and big project mentality". This included

the mind-set to manage through some very difficult issues that inevitably arise on big projects. IBM could have made sure there were clearer understandings with the client on this. In the event, in Dick's view, most NU managers did not have this big project mentality.

Looking back over all the events, for Keal there was an irony. What CLASS had set out to do was still required by both parties. If there was a way of doing it there was nothing IBM would like to do more. His final view reflected the opinion of many of his colleagues:

> *"Lots are trying this, trying to build the same thing. If somebody could crack it .... But you need insurance technical leadership, and a hands-on, hard driven sort of project management. It needs an insurance company that can afford to invest £100 million, or it's going to be done in partnership with somebody like IBM. And partnership is not words on paper".*

Reflections in time perspective

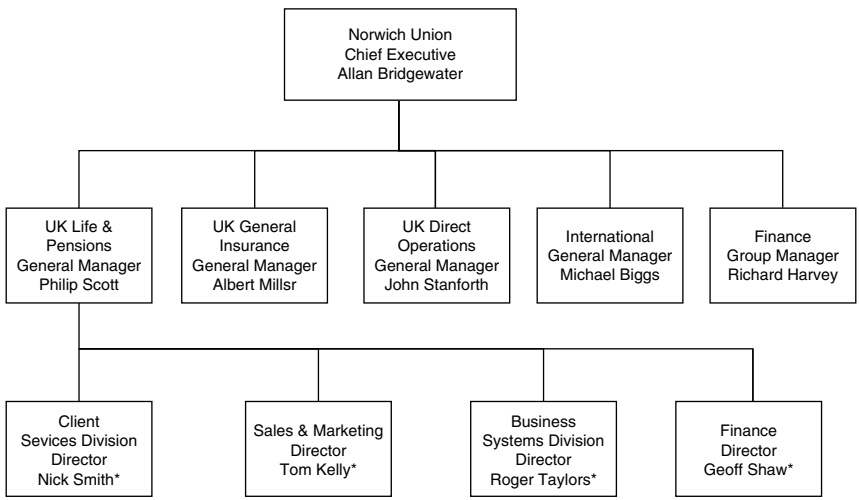
"It should have been the perfect partnership," so why did the project fail? Were there main causes that could have been identified earlier on? And what about lesser factors that led to the final outcome?

In retrospect what could have been done differently that would have made a significant difference? And was there something about the role of the CEO and CIO of Life and Pensions that led to this outcome? How positive and significant were their contributions?

But there was also the question: What could the supplier have done differently to secure a more positive outcome? And what are the major learning points for strategic IT-based business projects?

Appendix A

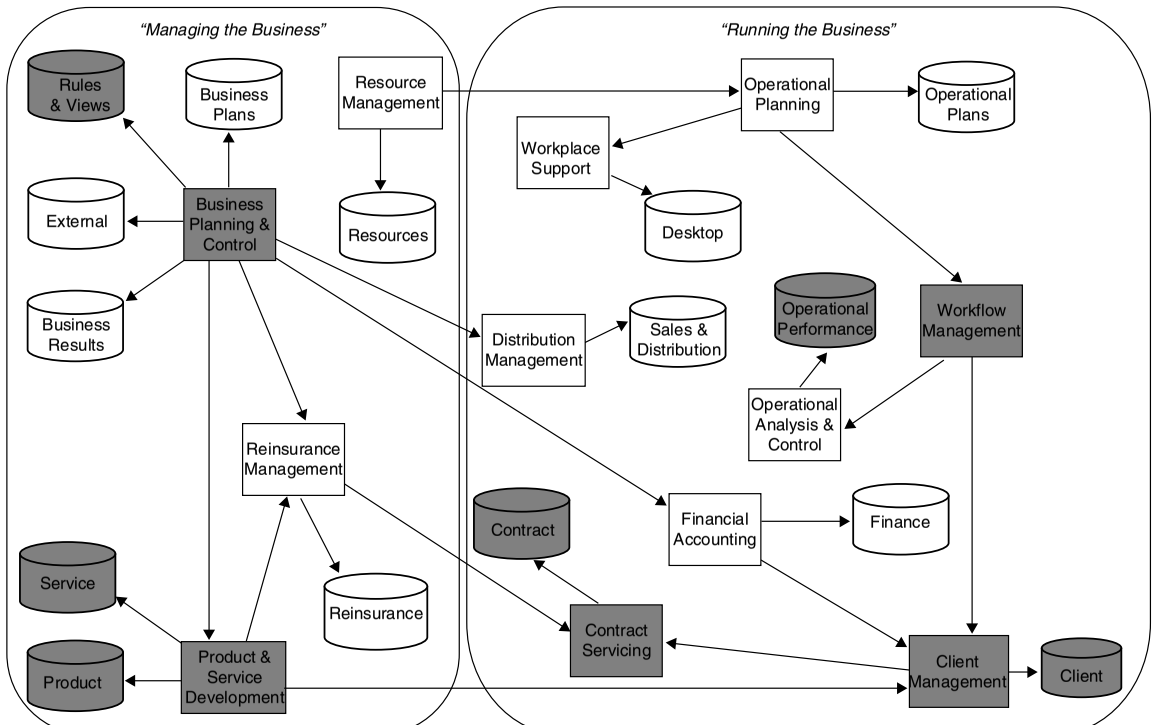
Norwich Union L. and P. Organisation, 1995



* CLASS steering group member

Appendix B

Scope of the CLASS project (Shaded areas)



Source: Invitation to tender

Appendix C

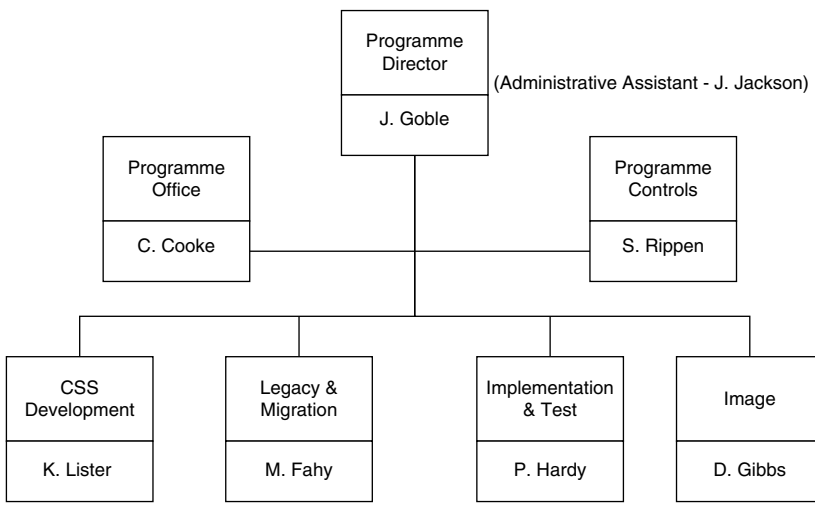
Principal milestones and timescales for CLASS

Time from commencement	Milestone
9 months	Workflow Management for Personal Pensions portfolio on legacy systems To be followed by Executive Schemes, Ordinary Business, Annuities, Corporate Schemes, agency and financial administration, at a pace to be agreed, but to be completed within 24 months of the commencement date
18 months	Full Client Repository, with Call Centre Capability
24 months	Availability of Contract, Product and Outbound Communications functionality, with Personal Pensions portfolio migrated to new platform
30 months	Complete data migration for all products currently supported on the Life/70 platform

Source: Invitation to tender

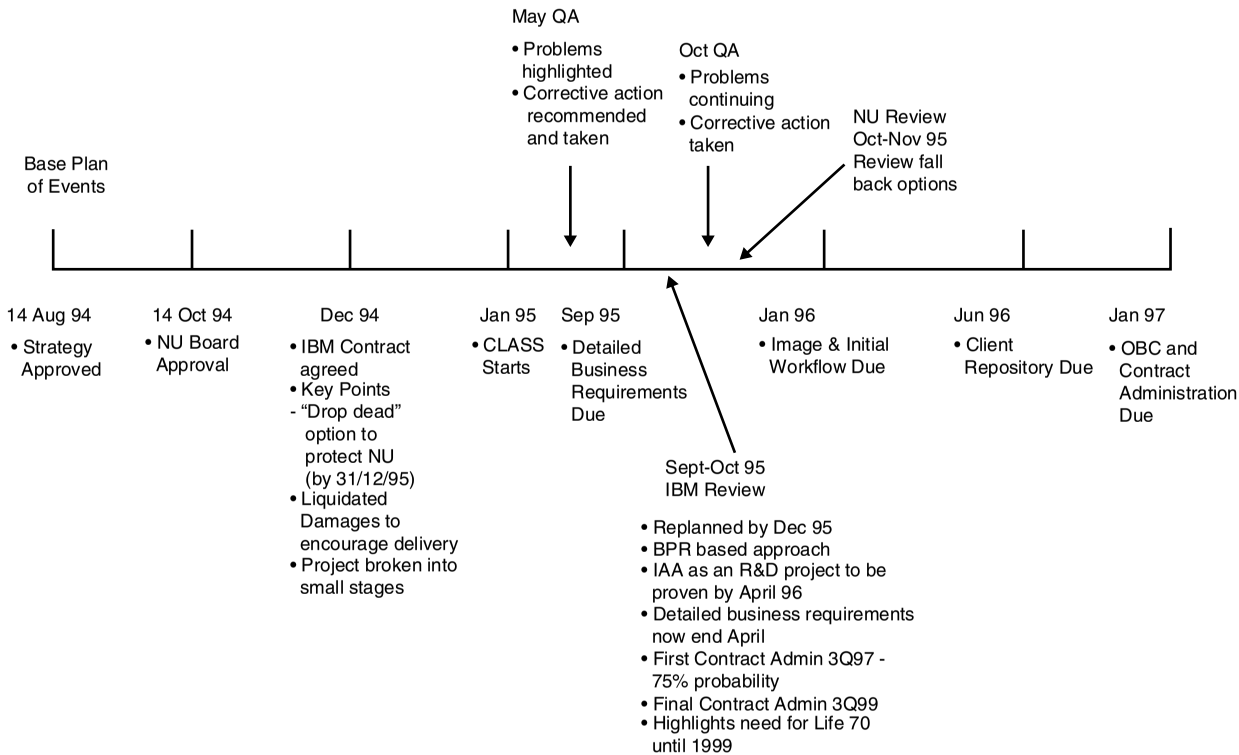
Appendix D

CLASS programme overall structure (January 1995)



Appendix E

Original milestones



CASE STUDY 6

Strategic challenges facing captive centers

Ilan Oshri

Acknowledgements

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Synopsis

Firms such as General Electric, Texas Instruments and Motorola that established captive centers[1] in India in the mid-1990s had formerly kept most of their offshored tasks in-house. Since then, however, the Indian IT service sector has grown and developed abilities to carry out both simple and complex IT maintenance and development, often more cheaply than their western competitors. This development has made western multinationals consider how to better utilize their offshore assets. For example, in 2006 SAP Hosting Services in Bangalore outsourced several hosting services to Tata Consultancy Services (TCS), also based in Bangalore. Other companies,

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[1] A captive center is a wholly-owned-subsidiary located offshore that performs various tasks ranging from the development of software applications to providing customer support for the parent company. The topic of captive centers is discussed in Chapter 10 of this book.

such as Standard Chartered and Hewlett Packard (HP), have followed a different approach in which their captive centers have provided services to both parent company and external service providers. British Airways, on the other hand, sold a majority stake of its captive center to the private equity firm Warburg Pincus in 2002. Apple Inc went even further and closed down its development center in India in 2006. Clearly, such changes suggest that the basic concept of the captive center is being transformed.

The offshoring industry

While offshoring has been around for a long time, in particular since US multinationals offshored labor-intensive manufacturing to low-cost developing countries such as Mexico and Panama, a significant development within the concept of offshoring has taken place since the mid-1990s. Companies such as Citigroup and American Express have started setting up offshore facilities to carry out enterprise-wide activities. As Friedman (1995) described in his book "The World is Flat", a global, web-enabled playing field has been created since the 1990s which has changed the way work is carried out and services are delivered. Since then, software maintenance and development has been carried out in a dispersed manner and at lower costs in countries such as India, the Philippines and China.

The drivers of offshoring

Cost savings is the main factor that drives offshoring. For example, a programmer in the US earns around US$ 100,000 yearly, while a programmer in India with the same qualifications and skills earns US$ 30,000 or less. Farrell (2005)[2] found that American companies save US$ 0.58 on every dollar spent on jobs moved to India. The main savings come from wages and from the bundling of activities in one location which results in a large economies of scale. The shortage of qualified labor in the West also prompts more companies to adopt BPO and ITO. The technology boom in the 1990s and the Y2K effect at the turn of the millennium boosted programmer wages in Western countries. Companies therefore started to search for alternative solutions in India, China and Eastern Europe.

[2] Farrell, D. (2005) "Offshoring: value creation through economic change". Journal of Management Studies, 42, 3, 675–83.

Offshoring work is not exempt from challenges and risks. Therefore, firms have traditionally considered three options in this context: (i) to contract work out to a service provider located offshore, (ii) to set up a joint venture with an offshore company, or (iii) to set up a wholly-owned captive center to carry out work at an offshore location.

Offshore outsourcing

Offshore outsourcing is defined as a contracting activity with a third service provider that is located offshore for the completion of a certain amount of work, for a specified length of time, cost and level of service.

Offshore outsourcing was first adopted by healthcare, telecommunication and technology industries in the late 1980s. Back then, industries in the US and other Western countries suffered from labor shortages. The demand for cheap, low-level data-entry personnel who were proficient in English led to offshore outsourcing in India and the Philippines. During the technology boom of the mid-1990s, offshore outsourcing was driven by the need to gain access to talented developers.

When choosing an offshore service provider, cost, quality, security and proximity are the main considerations. While such factors for successful offshore outsourcing have been known for some time, there have been quite a few examples in which offshore outsourcing projects have failed.

Joint ventures with offshore service providers

Joint ventures between a parent company and an offshore service provider have taken place since the 1980s. The main purpose of the joint venture is to reduce the risk of offshore outsourcing by gaining more control over intellectual properties, quality and costs. Companies that had no presence or limited developed infrastructure in a remote region often prefer to form a partnership through a joint venture with a local vendor over the establishment of a captive center or contracting out work to an offshore vendor. For example, an insurance firm or a retail bank would buy a company based offshore and run it jointly with the previous owner for a while in order to learn and understand local market conditions and gradually shape work routines according to their philosophy. When ready, the new owner would complete the takeover and assume full responsibility of the venture.

There are still significant risks in setting up a joint venture with an offshore service provider. Though the parent company may gain control

over processes and critical knowledge, and could share know-how with its local partner, there could still be intellectual property breaches and mistrust between the partners.

Captive centers

While companies have steadily increased the volume of work outsourced to offshore service providers, many have also set up offshore captive centers, the number of which is steadily growing.

Most captive centers are set up for one of the following reasons: to acquire skilled and motivated personnel or to expand and enter new markets (see Chapter 10 of this book). Reducing costs, though perceived to be one of the rationales, is in fact not so (see Appendix A). The cost-base of a captive center in India, for example, is about 15% more than the cost-base of a local service provider. Some of the benefits associated with setting up a captive center include the ability to secure intellectual properties and the more limited exposure of core competencies.[3]

Captive centers, however, have been struggling with ever-increasing costs, high employee attrition levels and the lack of integration with the firm's global strategy, and at times a lack of headquarters support. The size of a captive center is an imperative factor that could affect its success rate. Small captive centers are often hard to maintain, as these cannot build up large-scale operations and also can offer little long-term career growth to their employees, often resulting in a high level of attrition.

The emergence of captive centers

Captive centers arose in the mid-1990s. General Electric Capital International Services was one of the first companies to open a captive center in India in 1997. From the year 2000, the number of captive centers in India increased significantly. Among the Forbes 2000 companies, 44 had captive centers in India in 2000, 71 in 2003 and 110 in 2006, with about US$ 9 billion worth of IT and BPO activities shifted to captive centers in India in 2006 alone. By the end of 2008, over 500 captive centers had been set up in India.[4] The captive center market is now expected to grow by 30%

[3] Subramanian, M. and Atri, B. (2006). Captives in India: A Research Study. Infosys.

[4] Offshoring Times. (2008). A look at captive offshoring. Retrieved 09 03, 2008, from Offshoring Times: http://www.offshoringtimes.com/Pages/2008/offshore_news1889.html

yearly.[5] Among the most active sectors in setting up captive centers are the banking and finance, computer and electronics sectors.

Setting up a captive center, however, involves more than simply hiring employees, renting a building, and installing hardware. It requires both the development of unique capabilities and some specific expertise. A captive center is also affected by institutional forces such as political and regulatory changes, taxation, foreign investment regulations and the development of local labor markets. In addition, local employees' proficiency in English, the size of the local workforce and the educational system in the region are other factors that a multinational should consider when making such a decision.

Though a well-functioning captive center can offer some advantages, including massive savings in comparison to onshore activities, about 50% of all captive centers have failed.[6] Most captive centers face difficulties in the areas of product engineering, Research and Development (R&D), IT and other BPO services. Over 60% of captive centers suffer high operating costs and face around 20% staff turnover. Some commentators have recently predicted that the captive center model will eventually disappear, whereas others believe that it will remain as a viable alternative to offshore outsourcing.

Trends in captive centers

Attractive locations

Multinationals have set up captive centers in various countries and regions, including India, China, Latin America, and Central and Eastern Europe.[7] India has proven to be the favorite location because of its vast human capital, sophisticated level of education and relatively low language barrier.

Labor costs offshore are still expected to be lower than in Western countries for another 20 years, though the difference is narrowing. Declining labor-cost advantages are offset by the increased availability of qualified personnel and improved business environments.

Key emerging markets in Southeast Asia, Latin America and Eastern Europe are becoming more interesting in terms of talent, industry experience, quality certification and regulatory environment.

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[5] Mishra, P. (2007, 06 15). Outsourcing sees mix and match with captives, 3rd party vendors. Retrieved 09 05, 2008, from livemint.com- The Wall Street Journal: http://www.livemint.com/2007/06/15003046/Outsourcing-sees-mix-and-match.html

[6] Source: Offshoring Times (2008), op. cit.

[7] We discuss and compare several locations in Chapter 3 in this book.

Southeast Asian countries are strengthening their position as an alternative offshore location to India and China. Indonesia, Malaysia, the Philippines, Singapore, Vietnam and Thailand are among the most attractive 20 offshore locations worldwide, according to A.T. Kearney's Global Services Index.[8]

New policies that promote service exports to Latin American countries such as Argentina, Brazil, Chile, Mexico, and Uruguay have enhanced the attractiveness of these countries.

Newcomers in Eastern Europe, such as Bulgaria, Slovakia, and the Baltic States, are outperforming more established locations in the region such as the Czech Republic, Hungary and Poland.

The Middle East and Africa are on the rise, with Egypt, Jordan, Ghana, South Africa, Israel, United Arabic Emirates, Tunisia, and Turkey being the leaders.

These alternative locations to India have invested in roads, airports, telecommunications and other key infrastructures to attract ITO and BPO deals. Offshoring to these countries, however, will not soon catch up with India, which will probably hold its position for the next decade or more.[9] Indeed the intent is to supplement, not replace India. Interestingly enough, the number of captive centers newly established in Eastern Europe and Russia rose significantly between 2004 and 2007 to the extent that together its growth rate has surpassed India's. However, India still has the highest number of captive centers by far.

Two tales of captive centers

GlobalSoftware

GlobalSoftware, a leading software developer, planned to set up a product development center in India in the late 1990s. According to the co-director of the captive center, "India has excellent people and it provides many opportunities to grow fast".[10] When the captive center was established, the Internet boom was at its peak and IT companies were in need of talent

[8] The consultancy firm A.T. Kearney publishes the Global Services Index every year, rating the 50 most attractive offshoring destinations. Countries are evaluated against 43 measurements across three major categories: financial attractiveness, labor and skill availability, and business environment.

[9] Joshi, K. and Mudigonda, S. (2008) *"An analysis of India's future attractiveness as an offshore destination for IT and IT-enabled services"*, Journal of Information Technology 23(4), pp 228–231.

[10] Singapore Press Holdings Limited. (1999, 08 13). Bangalore tech par signs on more investors. Straits Times , p. 1.

and skills. Alain, the director of Process Improvement and Performance Management, recalls: "There was an arbitrage of costs and to certain extent some pressure to recruit the people".

In 1998 GlobalSoftware acquired IndiaTesting, a company that provided front-office software for marketing and business operations. The acquired company already had a team of 70 experienced software professionals, who immediately started to work on the parent company's new "Sales Force Automation" project and were directly involved in testing and customization. Within a few years, the captive center was able to expand its activities. Testing was among the most important services because of its cost advantage and effectiveness. For cost reasons, the captive center also hired many young people coming straight out of colleges in India. They were three to four times cheaper than engineers from the home country, claimed the captive center manager of Business Research Extension. In 2002, the captive center employed 500 software developers and received investments of over US$ 125 million from its parent company. By 2006, it had increased the capacity to over 3,000 staff, many of them software developers.

Despite all the success, both the captive center and the parent company had their worries. Top managers from the captive center felt that the full potential of the captive center had not materialized. In particular, managers thought that the software giant still considered its captive center as a back-office that should perform low-level tasks cheaply. One aspect of this was that all product development decisions regarding products that were partly or fully developed by the captive center were still taken by the parent firm headquarters. This approach did not allow the captive center to make recommendations about the firm's product portfolio and about the development of product features within the existing product line.

From the parent company's perspective, the captive center's high staff attrition rate was a serious problem. This problem was not unique to GlobalSoftware–many Western companies in India as well as local IT vendors faced the same challenge. "If we have a high level of attrition," said Alain, "we do not get to build domain knowledge. And if we do not build domain knowledge, we do not get more responsibility from the parent firm, GlobalSoftware. If you have an attrition of 25%, every two years you virtually start from zero".

Addressing the high attrition challenge

In order to cope with the high attrition levels, the captive center sought to outsource some of the repetitive tasks performed in-house. These were

some of the hosting services that provided technical support to both internal and external clients. The captive center also perceived the outsourcing of these services as an opportunity to divert talent from low-value to high-value activities. To accomplish this, the company entered a due diligence process with a service provider that was based nearby and which had had long term relationships with the parent firm. The outsourcing project was of small scale, about 2 million US$ per year, and involved the transfer of knowledge and hosting services from the captive center to the vendor over a period of three months, after which the vendor would assume full responsibility over these services. In order to successfully accomplish this outsourcing project, the captive center and the vendor agreed on the governing structure, business processes and knowledge transfer mechanisms and procedures, and the timelines per each major milestone. As the vendor was one of the leading Indian vendors in this area of services, Alain felt that he was in good hands. After all, the vendor had undertaken so many similar contracts that providing the captive center with such services should not be a major challenge. Furthermore, there was also the perception that since the client and vendor were located nearby, any issue which might arise would be easy to handle over a face-to-face meeting. Having discussed these matters, GlobalSoftware and the vendor were ready to launch this outsourcing project.

By early 2006, not long after their collaboration had commenced, Alain was not satisfied with the vendor's performance. Things got even worse later that year. Alain complained:

> *"We are so busy managing the vendor that at times it feels that we could have kept this activity in-house and would be better off. They never catch up with our introduction of new services. We trained their staff and yet we see that knowledge is not retained within their teams. We assumed that their employees, who are Indians, have the same perception as we have regarding quality and service standards. We were wrong!"*

The project manager from the vendor's side, who was also frustrated with the situation, gave a different picture:

> *"True, we suffer from a high level of attrition that affected our ability to retain knowledge. However, the client does not help with their continuous introduction of new services. They want far more than what we can deliver for such a small project. Yes, we have excellent methodologies to capture and retain knowledge and we also have service*

standards. But how can we justify applying these methodologies, procedures and techniques when it comes to such a small project?"

Alain was rethinking recent developments within the GlobalSoftware captive center. Although the outsourcing project was not going so well, he developed a good personal relationships with the vendor's relationship manager. He was hoping that the relationships with the vendor could be improved and that soon the performance would also get better. But what should they do? He was hoping to free up resources who could focus on high value activities and instead his workforce was now tied up in vendor management activities. Furthermore, he was wondering whether this outsourcing contract is changing the original purpose of setting up the captive center? If so, how did this strategy fit into GlobalSoftware's overall strategy?

GlobalAirline

In 1996, Nicolas, the now former managing director of GlobalAirline, one of the biggest European airlines, received a warning alarm: if the company wanted to survive, it had to get in shape soon. Profits had declined and the cost-base of passenger processing activities had been rising. Nicolas put together a task-force that included the general manager of the engineering department. His task was to analyze cost savings. He noticed that passenger revenue accounting demanded high-volume, low-skilled work that could be moved to a cheaper offshore location. The passenger revenue accounting unit then had over 600 full-time staff. Though GlobalAirline was familiar with offshore outsourcing, it had not outsourced passenger revenue accounting because it "was the blood of the organization" and had to be kept under control, according to Nicolas.

In August 1996, GlobalAirline decided to establish a wholly-owned captive center in India, to bring down costs while keeping control. The captive center was to be run as an independent profit center. India was chosen because the airline had direct flights from the headquarters location. GlobalAirline saw India's infrastructure as developed, which allowed for a relatively easy data transfer process. Culture was not perceived as a problem: the company was already familiar with the local markets and many of the cultural aspects in India. Indian workers were fluent in English and in addition the Indian government provided significant tax breaks among many other benefits.

The captive center was set up under an airline subdivision responsible for providing services and systems to external clients. A general manager

who had experience of customer services, sales and marketing in foreign countries was sent to India to set up the captive center. Shortly after its establishment, the captive center started to offer additional services such as customer relations. "Again, this was a high-volume activity, requiring a very quick turn-around," said Nicolas. "The prime reason for moving customer relations to the captive center was that it was becoming very expensive as a department to run–it needed many extra staff".

As a wholly-owned subsidiary, the captive center was not named after GlobalAirline. Its staff were employees of the captive center, not of GlobalAirline, to prevent union problems. A wholly-owned subsidiary also had the flexibility to reach third party clients. Nicolas said: "It became easier for me to make deals. If the captive center had had the parent company's name, there would have been major restrictions".

The captive center started off with 60 employees in a commercial space that could accommodate 300 people. But it grew quickly. Nicolas remembered:

> *"I had a number of companies coming to ask me what we were up to and wanted to know more about our services. Following this, GlobalAirline's top management quickly agreed that the captive center should offer services to third parties because it could bring down costs".*

However, "there was a lot of skepticism among the middle managers back home about whether the Indian captive center would work", said Nicolas.

This skepticism was unjustified. The captive center successfully acquired third party clients within a short period of time, thanks to GlobalAirline's worldwide alliance programs. When the captive center was launched, the parent company had already formed an alliance with other airlines, which included a trading services program. One key aspect to any success was information security. Being a wholly-owned subsidiary that did not carry the parent company's name helped the captive center to be less exposed to security breach attacks and made competitors less suspicious about confidentiality aspects when negotiating deals with the captive center.

Consequently, in November 1996, the captive center was already serving three external clients and was best known for supplying specialist computer skills such as ticketing and computer-based training. In 1998, the captive center broke even as expected and started to offer services to other businesses outside the airline industry, such as insurance. Nicolas said: "Again, the opportunity came partially through the parent company because one of the management directors was also on the executive board

of an insurance company". By 2000, the captive center was offering services to nine other airlines and had revenues of US$ 25 million a year.

Following the expansion of the GlobalAirline captive center and its range of services to third party clients, the captive center management team sought ways to further develop the unit. At that point in time, the captive center employed 1,500 staff, of whom 65% were serving the parent company and 35% were providing services to third party clients. In fact, the 35% focusing on external clients generated 45% of the captive center's total US$ 11 million revenue.

Dave, the former captive center General Manager, remembered that when he forwarded the five-year additional expansion plan to the management director of GlobalAirline, the director snapped: "What have you smoked? You have put forward a plan for 12,000 staff, which is about 30% extra headcounts for GlobalAirline". The board of the parent company stressed that they were running an airline, not an investment house, and therefore rejected the plan. However, as an external commentator observed: "The future strategy of the captive center requires investments to fully exploit its growing third party client base".[11] Capital was needed to develop skills relating to marketing and sales and building the scale of transactions within the captive center. A clash arose between the parent company and its captive center regarding the center's strategic direction. "It became obvious that the only way for the captive center to advance was to be sold off," Dave commented.

In 2001, GlobalAirline considered a takeover of its captive center by an investment house. The basis for the negotiations was that any agreement should "allow the future growth and development of the captive center, with the airline company still retaining a significant stake in the business".[12] The negotiations took over 18 months. According to representatives from the captive center side, the airline did not want management overheads in India and was concerned with service quality and costs once the private equity firm assumed a majority stake of ownership. Losing key employees was another concern. The private equity firm wished to see the new captive center managed without the parent company's influence. It was prepared, therefore, to sack old employees and let its people run operations.

[11] Dow Jones International News. (2001, November 23). GlobalAirline Starts W. GlobalAirline Stake Sale Talk. Dow Jones International News , p. 1.

[12] Reuters News. (2001, October 23). GlobalAirnline in talks for unit sell-off in India. Reuters News , p. 1.

Finally, in 2002, a deal was struck. GlobalAirline announced the sale of 70% of its captive center equity stake.[13] GlobalAirline did not intend to be involved in management decisions relating to the captive center, now that its major stake was held by the private equity firm. However, it hoped to still improve the financial performance from this transaction when the eventual value of its 30% stake in the captive center would increase

GlobalAirline chose the private equity firm for two reasons. "Money-wise they came with a good offer", Dave remarked, "and they had the right structure and culture to protect the interest of the airline, the captive center's principal customer". The takeover would also let the airline concentrate on its core business and let the captive center develop new businesses outside the airline industry.

The private equity firm was interested in acquiring GlobalAirline's captive center because the captive had established a leading position in the BPO segment in India. "The basis of the captive center, its infrastructure, set-up, and management team, was very attractive", Dave added. GlobalAirline's positive reputation, strengthened by its ISO 9000 certification and Six Sigma model, also helped the private equity firm make this acquisition decision. According to the private equity firm, during the divesture the BPO sector worldwide was poised to witness tremendous growth, and the firm saw the buyout as a valuable investment in building a leading global organization. The CEO of the private equity firm confirmed: "With this captive center, we now have deep domain knowledge of the sector. We will let the new company grow organically as well as through acquisitions in the Indian BPO market". The new chairman of the captive center also thought that the captive center had a great potential to handle complex and varied business processes, as there was no other captive center in India with such large scale and advanced domain knowledge.

After the acquisition, the private equity firm allotted a considerable sum of money to further develop the services provided by the captive center. The intention was that the captive center staff would increase to 10,000 full time employees in the next 5 years. "We can grow organically at 50% a year to the foreseeable future", predicted the new captive center chairman.

Within its first year as an independent company the captive center revenue grew by 120%, and by 2005 the BPO firm reported USD165 million in revenues. Supported by this rapid growth, the captive center went public in July 2006. It then faced new challenges. The Indian government

[13] Financial Times. (2002, April 4). Companies & Finance UK- GlobalAirline sells business outsourcing arm to W. Financial Times , p. 1.

applied different regulations to public BPOs and captive centers. Tax breaks for captive centers shrunk and in June 2006 the captive center was asked to repay service taxes to the government for the period 2003–2005. Meantime, however, the captive center had to satisfy its shareholders, who wanted a higher return on their investment each year.

Despite the difficulties, the IPO still allowed both GlobalAirline and the private equity a return on their investments. In 2008, according to Dave, only 10%-12% of the US$ 460 millions in revenues were being generated by the former parent company. The captive center was able to increase its capacity to over 18,000 employees, who were considered as core staff and no longer as back-office workers. This attracted more talent to the captive center and supported the knowledge-base developed offshore.

According to Dave, fast growth was possible because the private equity firm spent a great deal of money to "rebuild the communication infrastructure and bring in some very senior management plus their contacts and networks". Fast growth, however, did not come easily. Dave added: "The captive center had to fight for contracts after larger multinational players like IBM had entered India–there are few contracts left in the market not taken by the big companies".

Accounting for 40%, travel was still the strongest segment of the captive center's mainstream revenue. Banking, financial services, and insurance, however, together generated 40% of the revenue. The emerging segments of manufacturing, retail and consumer products supplied the remaining 20% of the revenue. According to the director of Investments and Alliances at GlobalAirline:

> *"The venture has turned out more successful than most of the airline leadership expected. There was no question that the airline made the right decision. The company has benefited from both its initial stake in what later became a successful commercial venture and also from the fact that its business processes are being done by a more efficient and viable entity".*

But one might wonder: have GlobalAirline done the right thing? Perhaps they should have maintained ownership of the captive center, considering its success?

Epilogue

The basic concept of a captive center is to provide services to the parent company from an offshore location. However, the above stories illustrate a

different reality. Some captive centers have outsourced part of their activities to a local vendor, while others have expanded by providing services to external clients. Divesting the captive center is another move that some parent companies have considered, and in other cases the captive center has been closed down.

These strategic moves bring to the fore the following questions. How should a parent company strategically perceive its captive center in terms of its allocation and utilization of resources? And in doing so, what capabilities should be developed offshore to support the evolution of a captive center?

Appendix A – Setting up costs: Local provider versus captive center

Criteria	Local providers	Captive
Annual salary	$7,770 to $8,200	$9,500 to $10,300
Shiftsper day	1.2 to 1.5	1 to 1.2
Costs per square foot (Bangalore)	$11 to $13	$14 to 16
Expatriates for every 1,000 full-time employees (FTEs)	0 to 1	3 to 5
General management staff for every 1,000 FTEs	12 to 14	16 to 18
General management annual salary range	$55,000 to $65,000	$70,000 to $90,000
Travel and entertainment costs per FTE	$280 to $320	$900 to $1,060

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