## A Framework for Strategizing and Deciding IT Sourcing and Managing Outsourced Services

by

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#### **Abstract**

This thesis is construed as a part of M.I.T. Sloan School project sponsored by a Fortune 500 company (hereafter referred as "The Company") to study disintermediation in the IT service industry.

In this thesis we develop an integrated framework of IT outsourcing processes for enterprise users based upon our research findings. Each individual element is supported by a published, industry-accepted framework; what is unique is our integration of these accepted frameworks into a best practices model that supports customer firms through the entire IT lifecycle. In addition, we analyze future trends in IT outsourcing as to how enterprise needs will change over the next three to four years. To achieve these objectives, we've employed three research methods: literature review, in-person interview with corporate users, and a paper-based survey.

The key to successful IT outsourcing lies in the establishment of a strategic partnership between a firm and its IT service provider. From client's point of view, there is no short cut or cookie-cutter method for successful outsourcing. People skills are the most demanded skills for successful outsourcing because human beings ultimately manage all technology. As hardware becomes a commodity, users see more value in customized IT solutions that help companies achieve business goals. IT service providers who can understand a client's business strategy and processes will be able to compete in higher tiers of the IT value chain.

Thesis Supervisor: Gabriel R. Bitran

Title: Deputy Dean, Alfred P. Sloan School of Management

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We would also like to thank Dan Boggs all the people at Hewlett Packard who supported our project. Their insightful comments based on leading edge business experiences were not only quite helpful for us, but also gave us a fresh perspective from which to look at the fast changing IT industry. Without their warm support and appropriate back up, our project could not have been accomplished in such a satisfactory manner.

Thirdly, we want to thank Gladys Scott for her continuous support for the entire period of the project. She helped us to turn our initial thoughts into more consistent form by giving us useful advice and suggestions. Her tenacious attitude towards quality deliverables inspired us to achieve this challenging project.

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## **Executive Summary**

This thesis attempts to address the topic of information technology outsourcing from the perspective of the buyer or firm who is considering the engagement of an outsourcing provider. We will present a unique integrated set of published frameworks as a best practice set for the outsourcing buyer. Our writing, however, serves a second important purpose in educating the outsourcing provider community in the desires and requirements of the customer community. An outsourcing provider who seeks to embrace this customer insight and adjust its value proposition accordingly can reap substantial rewards.

In our Early Experiences chapter, we reviewed some pioneering cases of strategic outsourcing conducted in the early '90s in order to understand outsourcing trends of the past. Although IT outsourcing was not a new phenomenon, the '90s was a decade in which the concept of outsourcing dramatically evolved from partial outsourcing to comprehensive outsourcing mainly in two ways: (1) the scale and range of outsourcing became more comprehensive, (2) the primary purpose of outsourcing shifted from attaining cost savings to increasing strategic value to the firm. We examined three historic outsourcing cases: Eastman Kodak, Continental Bank, and the BP Exploration Operating Company.

In our chapter Current and Future Trends, we first examined industry trends gleaned from data collected through independent research firms and our own survey. Overall, most surveys showed similar trends: (1) IT outsourcing is stepping up from a department-level functional issue to a corporate-level management issue, (2) companies understand that the best price doesn't equate to the most satisfaction, (3) lack of vendor flexibility is a common problem, (4) maintaining governance during the execution period is critical to maximizing benefits. Because business and IT strategy have become more and more integrated during the past decade, customer firms' expectation of IT outsourcing has expanded from merely reducing system costs to maximizing corporate value. Based on these survey results, it is anticipated that companies will continue to use outsourcing services to attain expertise not available to firms, increase speed to capability delivery, and ensure scalability.

In our Best Practices chapter, we developed an integrated framework of IT outsourcing processes for enterprise users based upon our research findings. Each individual element is supported by a published, industry-accepted framework; what is unique is our integration of these accepted frameworks into a best practices model that supports customer firms through the entire IT lifecycle. We offer four fundamental processes essential to successful strategic IT outsourcing. Each is briefly summarized as follows:

**Business Strategy:** Strategy is the cornerstone of all corporate action. To deliver value, a firm's IT strategy must be tightly aligned with its business strategy. As an outcome of corporate, business and IT strategy development, a firm will have a specific set of multiyear broad action plans and specific action programs to be resourced. Corporate resourcing decisions follow the definition of these action plans and programs. Defined corporate, business and functional (IT) strategies provide the basis for core competency determination and subsequently for a decision as to in-source or outsource IT services.

**Process Engineering:** The process of defining a firm's processes serves many masters: the disciplined process is critical to effective negotiation with outsourcing providers; it involves business process owners in thorough analysis of the activities a firm expends resources upon; it may produce the first written guidance of operational procedure for the activity and serve to educate current and future employees; it offers firms the choice in level of effort ranging from "as-is" assumption to radical reengineering; it produces efficiencies through adaptation of standardized processes; it provides the quantification of quality, efficiency and frequency required to allow the development of outsourcing documents to include the request for information (RFI), request for proposal (RFP), statement of work (SOW), and ultimately the service level agreement (SLA).

**Provider Selection:** Enterprise users sifting through potential outsourcers must remember that switching cost is very high, the lock-in effect is very strong, and that contracts don't guarantee satisfactory results. Therefore, selecting the right provider is a critical factor in any outsourcing effort. Because motivation and partnership matter most in a long-term relationship, qualitative factors such as communication skills, management style, strategic orientation, and cultural fit have the same degree of importance to outsourcing success as do

technical expertise and experience. The provider selection process is time consuming and painstaking, yet such efforts are necessary to minimize the risks and maximize the returns of outsourcing.

Execution: The execution process and governance feedback loop are enabled by technology to provide accurate and timely representation of the health of the provided service. With adequate controls in place, the IT service provider and customer can reinforce effective communication with information. This information will enable both leaders to fully and qualitatively engage in the desired partnering toward fulfillment of business goals. It also serves to further bond relationships in the outsourcing arrangement when outsourcing partners are successful in applying their shared vision for IT in the business toward the recognition of patterns of activity that suggest business connections and interdependencies. As technology evolves, formerly appropriate measures may need adjustment, new services may be warranted that enable added value to the business and provider. Such business systems thinking, coupled with a focus on action and problem solving, make for a dynamic outsourcing partnership.

In our last chapter, we drew two conclusions. The first conclusion is that the most important factor for successful IT outsourcing is creation of partnership and strategic orientation between customer and outsourcing provider. Trusting relationships must be built and maintained on both sides of the partnership; no proprietary project management methodologies, exciting technology, or management support can substitute for a strong relationship between motivated managers equally determined to make an outsourcing partnership succeed to the benefit of both. Outsourcing begins a long-term relationship surrounded by uncertainty. Our research found that the majority of enterprises encountered business environment changes or project management problems after signing a contract. Yet, given customers high switching costs, incumbent contractors are rarely replaced. A service provider's understanding of client business strategy and culture are not easily replaced or replicated. Due diligence in the selection of an outsourcing provider is indispensable.

Our second conclusion is that IT service providers should position themselves further up the IT value chain. Today's corporate customers see more value in customized IT solution

services that fill the gap between their business goals and internal IT resources. Further, IT outsourcing decisions are virtually always made from the top of the customer organization for strategic decisions and from lower levels for technical decisions. Therefore, the earlier in the decision-making stage (i.e. the higher in decision-making hierarchy) the IT provider is involved, the more influence the provider can have in outcomes, including system architecture and hardware provider selection. If we overlay a hierarchical value chain of IT services with Hax & Majluf's Delta Model<sup>1</sup>, differentiating best products, total customer solutions and system lock-in, we are able to highlight the holistic synergy enabled for both customer and provider in an outsourcing partnership. The customer takes comfort in knowing the provider understands the nature of the customer's business, and will oversee delivery of desired business results. Extending expertise and services up the value chain towards business strategy services, the outsourcing provider not only enjoys higher margins, but is first in line to execute those strategies with its own resources or through partnership with other capable firms. At this level in the value chain, system lock-in is obtained with high exit costs for the customer. However, if a provider remains competitive only at the infrastructure layer in the IT value chain, business opportunity will be limited and a provider is likely to be disintermediated by competitors who operate further up the value chain where corporate decision makers reside.

<sup>&</sup>lt;sup>1</sup> Hax, Arnoldo and Wilde, Dean (2001). The Delta Project. New Jersey: Prentice Hall.

## Chapter I. Introduction

A broader definition of outsourcing services is resulting from widespread reliance on third parties to support business goals and to allow companies to focus on core competence. Growing recognition of the imperatives to align business and IT strategy has been a significant driver for the adoption of a "business-focused" approach to strategic IT outsourcing. Once perceived as a technical tool by organizations to manage IT assets and infrastructure, IT outsourcing has gained a broader meaning in organizations. This trend expands IT outsourcing responsibility to the underlying business processes and even business outcomes. In addition, the recent impact of e-business is a significant factor in all aspects related to IT such as products and services, calling into question what the future outsourcing demands will be and how IT service providers will need to respond to ever changing customer needs.

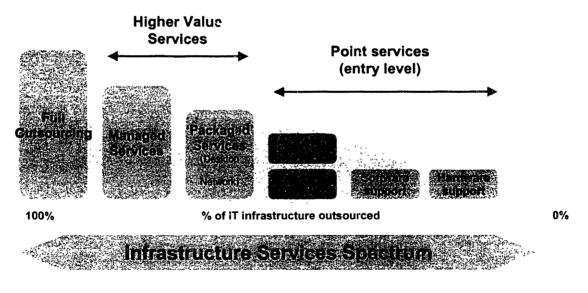


Figure 1: Definition of IT Outsourcing

Source: IDC

It is necessary to define the term "outsourcing" within the scope of this thesis. James Brian Quinn and Frederick Hilmer defined outsourcing as "[t]he purchase of a good or service that

was previously provided internally."<sup>2</sup> Unlike other outsourcing, such as facility maintenance, canteens, and employment welfare services, IT outsourcing requires deliberate coordination between business strategy and sourcing strategy because IT is much more critical to a firm's overall competitiveness and operational efficiency. In fact, it is quite common that a company suffers from higher costs, less efficiency, and more system troubles as a result of IT outsourcing -- all while being locked-in on a long-term contact with an outsourcing provider.

Because the concept of IT outsourcing is not homogeneous, the level of outsourcing services could vary from simple PC maintenance support to comprehensive outsourcing which includes transferring IT department staff to a service provider. For example, The Company categorizes IT outsourcing services in the following three levels depending on the level of provider's involvement, such as "Comprehensive Outsourcing", "Infrastructure Management Services", and "Complementary Management Services".

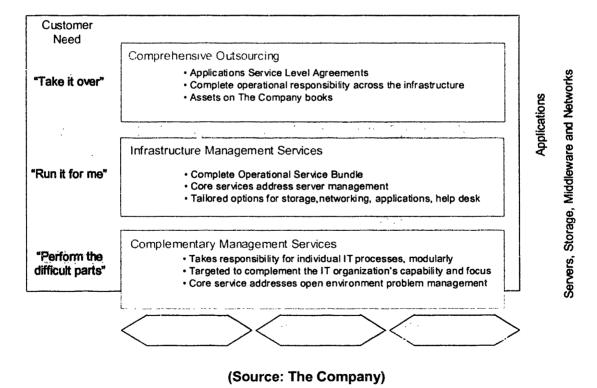


Figure 2: Type of IT Outsourcing

<sup>&</sup>lt;sup>2</sup> James Brian Quinn and Frederick Hilmer. (Summer 1994). *Strategic Outsourcing*. Sloan management Review 35/4

In our thesis, we define the term outsourcing as "[t]he organizational decision to turn over part or all of an organization's information system (IS) functions to external service provider(s) in order for an organization to be able to achieve its goals".

More concretely, IT outsourcing includes the following services.

- Application development and maintenance
- System operations
- Network/telecommunications management
- End-user computing support
- Systems planning and management
- Purchase of application software
- Business strategy consulting services

As the importance of IT in corporate strategy increases, it is not realistic to separate IT outsourcing services from business consulting services. Thus, in addition to Grover, Teng, and Cheon's definition, we have included strategic consulting services, that currently provided by management consulting firms such as Accenture, Booz Allen & Hamilton, and A.T. Kearney, in the scope of IT outsourcing.

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<sup>&</sup>lt;sup>3</sup> V.Grover, J.T.C. Teng, and M.J. Cheon. (1998). Towards a Theoretically-based Contingency Model of Information Systems Outsorucing: Strategic Sourcing of Information Systems. John Wiley & Sons

## Chapter II. Early Experiences

## II-1. Migration Towards Outsourcing

In this chapter, we review the historic outsourcing cases conducted in the '90s. Through the '70s and the '80s, it was common for enterprises to outsource IT functionality piece by piece such as hardware maintenance, application development, and facilities management (Grover, Teng, and Cheon 1998)<sup>4</sup>. The '90s was a decade in when the concept of outsourcing evolved mainly in two ways (figure 3):

- 1) The scale and scope of outsourcing became more comprehensive.
- 2) The primary purpose of outsourcing shifted from saving costs to creating strategic value.

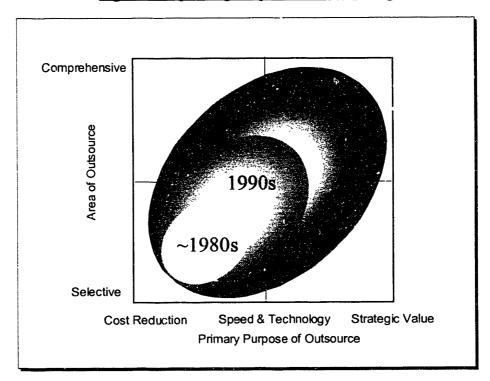


Figure 3: Expanding Scope of IT Outsourcing

To understand the motivation and key drivers behind these new outsourcing trends, we selected the following historic outsourcing cases to review.

<sup>&</sup>lt;sup>4</sup> V.Grover, J.T.C. Teng, and M.J. Cheon. (1998). Towards a Theoretically-based Contingency Model of Information Systems Outsorucing: Strategic Sourcing of Information Systems. John Wiley & Sons

#### II-2. Early Outsourcing Pioneers

#### II-2-1. Eastman Kodak 1989:

Eastman Kodak was the first visible Fortune 500 company to argue that IT was primarily a commodity best handled by expert providers rather than a coveted strategic asset<sup>5</sup>. Kodak pioneered the first full-scale IT outsourcing with IBM, DEC, and BusinessLand in 1989. After reviewing and analyzing the future model of information systems as a part of their firm-wide strategic reformation, Kodak realized that they needed to have a drastic change in their corporate information systems, which required large investments in budget, time, and human resources. Management determined comprehensive IT outsourcing was the answer to effectively approach their goal.

The idea of outsourcing information systems was not new even at that time. In fact, small and mid-scale companies who didn't possess sufficient IT resources used external IT providers from time to time for their data input, systems development, and system maintenance needs. However, the way Kodak outsourced was very different from earlier efforts because it was comprehensive outsourcing in which IBM took over not only Kodak's IT hardware and operation but also its IT human resources.

Through this outsourcing, Kodak aimed for the following points.

- Reallocate management resources to its core business
- Maximize the interest of shareholders
- Improve the service level of IT system support
- Create the flexibility in IT systems to cope with a fast changing business environment

Although the IT system was indispensable to Kodak, hardware and data centers themselves didn't generate any profit. If Kodak could reduce IT investment and reallocate the budget to their core businesses that created cash flow, it would increase shareholder value. Kodak foresaw the following merits in IT outsourcing.

<sup>&</sup>lt;sup>5</sup> L.P Willcocks and M. C. Lacity. (1998). Introduction – The Sourcing and Outsourcing of IS Shock of the New? Strategic Sourcing of Information Systems. John Wiley & Sons

- IT outsourcing helps the company transform its IT budget from a fixed cost to a variable cost. If Kodak held its own hardware as fixed assets, it would be very difficult to quickly scale computing capacity as business volume fluctuates.
- Outsourcing provider's latest knowledge and skill sets were also attractive to the company. Burdened with the on-going effort to maintain IT employee currency in the latest technologies, Kodak felt it could take advantage of the latest information technology by using external providers whose competitive edge lies in IT development and operations.
- Outsourcing creates an adequate "tension" between outsourcer and outsourcee whereas internal systems departments potentially create an ambiguous relationship with end-users.
- Outsourcing promotes process standardization, eliminating ad-hoc workflow that makes systems complicated and costly.

To select outsourcing partners, Kodak required candidates to identify how they improve or maintain the following points<sup>6</sup>.

- Transition and development opportunities for employees
- Service quality
- Cost structure
- Identification and assimilation of emerging technologies
- Support systems and management process

After the selection process, three providers – IBM, DEC, and BusinessLand – were appointed as data centers, telecommunications, and personal computer services respectively.

During the contract negotiation process, wanting to develop a framework for its future outsourcing business, IBM brought an agreement which was compact and written in plain language whereas DEC brought a very detailed contract, believing that rigidity would help to avoid future dispute between the parties. Later, Kodak found that too detailed an agreement didn't fit with the way their business runs, lacking flexibility in day-to-day operations.

<sup>&</sup>lt;sup>6</sup> Applegate, Lynda and Montealegre, Ramiro. (1995). Eastman Kodak Co.: Managing Information Systems Through Strategic Alliances. Harvard Business School Case 9-192-030

Overall this outsourcing project resulted in significant gain to Kodak's IT function in terms of cost and service levels. The lessons Kodak learned from this project as follows<sup>7</sup>.

#### **Outsourcing Decision**

- Non-core services (information transport), not core services (information content), are candidates for outsourcing
- Non-core services are inextricably intertwined with core services
- Outsourcing IT is a strategic alliance, not a simple "hand off"
- Previous problems will still remain problems

#### Selecting a Partner

- Ability to work together over long term is critical
- Begin relationship management process early
- Be sure negotiation team will still be involved in long-term management
- Understand how your partner will make money on the deal

#### **Contract Negotiation**

- The contract should serve as a framework for the relationship. Don't try to specify everything in detail
- Define ownership of current & future assets (e.g. software, information)
- Both sides should write down what they think the contract says and compare understandings before signing

#### Long-term Management

- There is significant overhead in coordination and control
- Service delivery and management control processes must be redesigned to incorporate the inter-organizational nature of the alliance
- Both organizations are undergoing significant organizational changes. Partners must work together to manage change

<sup>&</sup>lt;sup>7</sup> Applegate, Lynda and Montealegre, Ramiro. (1995). Eastman Kodak Co.: Managing Information Systems Through Strategic Alliances. Harvard Business School Case 9-192-030

#### II-2-2. Continental Bank in 1991:

In 1990, Continental Bank was still in trouble. Having more than \$1 billion in bad loans due to large-scale, energy-related investments, Continental faced a liquidity crisis and asked the FDIC for help in 1984. Although Continental let thousands of employees go and changed its main business from retail banking to wholesale banking, its status was not stable enough to survive<sup>8</sup>.

Management looked for a way to revive the bank; outsourcing was one of the major solutions chosen. Although outsourcing some peripheral functions, such as the cafeteria and legal services, was not unusual in the banking industry at that time, outsourcing nearly all information technology services was quite unusual for money-center banks. When Continental Bank entered into a 10-year contract with IBM for several hundred million dollars, the industry was taken by surprise.

The decision was made in order to allow the bank to concentrate on its core business with limited management resources. It became a financial intermediary, product originator, and principal trader with a strong customer focus.

At that time, the bank had four major problems in the IT area:

- Out-dated mainframe computer system couldn't cope with customer needs
- Small desk-top computers and databases were independently installed without firm-wide coordination
- The 500-member IT staff was insufficient to support the bank's mainframe computer system
- Staying on top of banking technology required large IT investments

With the ultimate realization that most important was not understanding information technology, but having an intimate knowledge of customer's needs and establishing a strong relationship with the customer, by March 1991, most managers came to agree with outsourcing all IT systems.

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<sup>&</sup>lt;sup>8</sup> Richard Huber. (1993). How Continental Bank Outsourced Its "Crown Jewels". Harvard Business Review Jan-Feb 1993

Continental Bank clarified the strategic targets of outsourcing as follows.

- Technology improvements--particularly an improved ability to use advanced technology without huge development cost
- Strategic enhancements--including more time and resources to focus on the bank's core business
- Financial gains achieved from drastically cutting the IT payroll, converting technology costs from fixed to variable, leasing bank's data center and selling its equipment
- Improved management and better IT budgeting by outsourcing its IT in the summer of 1991. The bank took advantage of a competitive shakeup in the technology business

After winnowing down to a short list of candidates--Andersen Consulting, Computer Science Corporation (CSC), and Integrated System Solutions Corporation (ISSC)--the Bank made a final selection based on the following criteria.

- Provider's ability to address the bank's specific technology needs
- Their plans for the bank's IT staff
- Pricing for a 10-year contract

The bank finally chose ISSC as it offered the best proposal from the beginning. The documentation process took three months. Through the contract, Continental Bank wanted to gain the control of IT management and clarify the measurement of provider performance while minimizing the risk of outsourcing.

Unlike conventional contracting practices that are based on a provider's estimation of person-hours a job would require, Continental Bank introduced a business functionality basis measurement, which is more consistent with the benefit a bank receives. The contract included many aspects and potential risks such as confidentiality of data, termination rights and responsibilities, inflation adjustments, volume measures and pricing, transition cost, and cancellation penalties.

As a result of this outsourcing, 80% of the bank's IT department staff was transferred to ISSC. The bank's newly formed technical oversight group (TOG) consisted of representatives from the bank's business units and a 20-member management group who

understood both IT and the services the bank was buying from ISSC. As a window to ISSC, these groups monitor and communicate with ISSC in order to maximize the effect of outsourcing. Overall this outsourcing was successful to the bank in terms of cost savings (estimated \$10 million per year) and renewed strategic focus on its core business as business units were released from troublesome IT management issues<sup>9</sup>.

## II-2-3. BP Exploration Operating Company in 1993:

In 1993, BP Exploration Operating Company (BPE), a subsidiary of British Petroleum, started its IT outsourcing effort in order to reduce cost, obtain a flexible and quality system, and concentrate company's resources into its core business. Like other companies who had already outsourced its IT resources, BPE judged that there was no necessity to maintain its own internal IT systems.

Although IT was an indispensable management resource to BPE, and BPE was internally developing business application software with its 1,400 IT people, after outsourcing started, the IT department was scaled down to 150 people and its main function was transformed to business process consulting services.

Before starting the outsourcing effort, BEP standardized its IT system and consolidated data centers to two locations. This resulted 50% IT staff reduction, leading to 25% cost reduction<sup>10</sup>. The point was that BEP made operations as efficient as possible before they outsourced IT to providers so that BEP didn't have to pay millions of dollars for what they could do by themselves.

Through pre-outsourcing research, BEP found that single-provider outsourcing embraced the potential risk of depending on particular provider's technical skills, management capability, and service level until a contract expires. Thus, single-provider outsourcing was not BPE's option. However, BPE didn't choose typical multiple-provider outsourcing either because

<sup>10</sup> John Cross. (1995). IT Outsourcing: British Petroleum's Competitive Approach. Harvard Business Review May-Jun 1995

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<sup>&</sup>lt;sup>9</sup> Richard Huber. (1993). How Continental Bank Outsourced Its "Crown Jewels". Harvard Business Review Jan-Feb 1993

they worried about large overhead due to the complexity of orchestrating multiple providers. Thus, BPE sought a hybrid approach by which BPE could realize both the multi-provider's benefit of best of breed services and a single provider's low overhead.

To select outsourcing providers, BEP sent out survey forms to more than 100 providers in the U.S and Europe. Out of 65 providers who responded, BEP selected 16 after a careful screening process. Then staff from BEP's IT department actually visited the 16 providers and conducted in person interviews. Through the interviews, BEP staff checked many aspects such as corporate culture, management style, strategic vision, innovativeness, and service-orientation. Price was not a primary concern to BEP. At this stage, BEP sent out a detailed request for proposal (RFP) to six candidates on the short list. Then, BEP asked all six providers to deliver a proposal. Because BEP wanted multiple providers to provide integrated IT services by collaborating together, BEP's main concern was whether providers could work together in an efficient manner after a mandate was given. Thus, BEP devised a unique way to conduct a final selection. BEP held an interactive workshop by inviting six providers to make a proposal within a week under the following conditions:

- All providers had to work in groups to make a collective proposal.
- Each group had to consist of more than one but less than five providers.

After a week, a proposal collectively made by three providers, Sema Group, Science Applications International Corporation, and Syncordia (a subsidiary of British Telecommunication) was accepted by BEP. Under the proposal, the all three providers were supposed to complement each other to provide integrated services as if they were a single provider. The providers were free to sub-contract certain functions if they believed it was more efficient to employ a third party with expertise in the particular area.

Although BEP's unique strategy – using three providers as a single provider – became a backbone of BPE's IT outsourcing strategy, some unexpected problems occurred in the beginning. For example, unlike senior level managers at each provider who understood the concept of "collective services", lower-level staff's understanding was insufficient, resulting some mis-synchronization in operations. Because the three providers were essentially competitors, they didn't want to share skill sets or know-how which were useful to run the

outsourcing operation as a team. However, this outsourcing brought tangible results: the number of BEP IT staff was reduced by one fifth and total IT cost reduced from \$360 million in 1989 to \$182m in 1994<sup>11</sup>.

Through this outsourcing, BEP realized that the IT outsourcing service increased the flexibility of its IT strategies while reducing cost. It allowed the company to focus its internal resources on its core business – finding and producing hydrocarbons.

## II-3. Keys for Successful Outsourcing

Upon analysis of the aforesaid three cases, we can draw some important lessons. First, before a company uses external IT providers, it must be clear as to the objectives of outsourcing. Reducing IT cost, focusing on core business, and taking advantage of the latest technology are major reasons to outsource. For all the cases above, the companies had clear goals in outsourcing, which were not just cost reduction, but a focus of internal resources on its core business to increase competitiveness and corporate value.

Second, a company has to understand the difficulties and complexity of IT outsourcing. Unlike other outsource-able business functions, such as cafeterias, mailrooms, and building facility maintenance, an information system is deeply linked to the company's business model and structure, and thus its function is critical. This means that the process of IT outsourcing is quite heterogeneous, reflecting the individual company's strategy and organizational style. All the companies above conducted extensive research and planning before they signed their contracts with providers. For example, BPE standardized its IT system and consolidated data centers before they hired outsourcing providers because they didn't see the point in spending money on something they could do by themselves. Also, each company attempted a unique but prudent provider selection process. Not the price, but provider's technical and management skills to deal with certain requirements, was considered top criteria in the selection process.

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<sup>&</sup>lt;sup>11</sup> John Cross. (1995). IT Outsourcing: British Petroleum's Competitive Approach. Harvard Business Review May-Jun 1995

Third, the cases showed that the way to orchestrate IT providers is also the key to making outsourcing successful. Only Continental Bank took a single-provider approach to avoid the large overhead of controlling multiple providers. In the other two cases, a multi-provider approach was taken after they considered the complexity and risk of employing multiple providers in advance. For example, balancing the overhead of orchestrating multiple providers and the risk of being limited to a single provider's capacity, BEP invented the "hybrid" approach in which three selected providers are obliged to collectively work as one. The cases showed that managing a contract with outside providers requires a different set of skills than that required for solving technical IT problems.

Finally, it is important to recognize that strategic IT outsourcing was just dawning during the late '80s to early '90s; there was no single best way to outsource IT systems. It can be concluded that most companies went through a trial and error process, seeking the way to achieve its own strategic goals while minimizing the cost and risks.

## Chapter III. Current and Future Trends

In this chapter, we will examine the current trends and issues regarding strategic IT outsourcing from an enterprise standpoint. As discussed in the previous chapter, the nature of IT outsourcing has evolved from functional decision to strategic decision since the 80's. According to Grover and Teng, and Cheon<sup>12</sup>, compared with the 70's, current outsourcing practices differ in the following ways:

- Larger companies are introducing comprehensive outsourcing services including transferring hardware and human assets.
- A greater range and depth of IT functions are being outsourced.
- Service providers are accepting more responsibility and risk than before.
- The nature of the relationship with service providers is changing and in many cases is a partnership rather than seller-buyer relationship.
- The speed and complexity of information technology is increasing, forcing more companies to evaluate the option of outsourcing to maintain pace. To examine this trend toward IT outsourcing becoming a more significant corporate management issue, we examined surveys conducted by major industry research firms such as Gartner Dataquest and The Conference Board, and conducted our own survey.

## III-1. Industry Survey Findings

## III-1-1. Cost Saving is No Longer Primary

We attribute changes in outsourcing strategy to the changes in perception of information technology among U.S. enterprises. Although cost savings is still one of the major objectives of outsourcing, it is not the sole benefit that enterprises expect to receive when they engage in outsourcing. In fact, according to the user survey conducted by Gartner Dataquest (November 2001)<sup>13</sup>, the top three reasons to outsource are "access to critical IT skills", "quality of service", and "scalability". "Cost savings" is the sixth reason to outsource.

<sup>&</sup>lt;sup>12</sup> V. Grover and J. Teng, and M. Cheon. (1998). Towards a Theoretically-based Contingency Model of Information Systems Outsourcing

As the evolution of information technology picks up the speed and required IT skills become more specialized, and the cost to internally educate IT professionals becomes higher. This implies that even the latest technology tends to become obsolcte in a relatively short period. Thus, enterprises have started seeking better solutions to access this critical technology without heavily investing in internal resources.

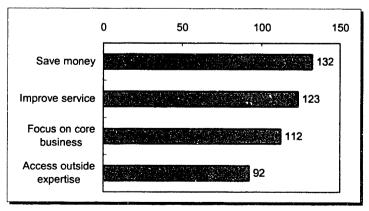
Access to Critical IT Skills Quality of Service Scalability Focus on Core Competencies Capacity on Demand Cost Saving Speed of Deployment Ability to Meet Future Needs Operational Efficiency Standardization Capital Spending Constraints Competitive Advantage **Business Charges** 0 2 3 5 6

Figure 4: Skills, Quality and Scalability Drive Solutions Outsourcing

Note: Ratings based on a scale of 1 to 7 in which 1 = not important and 7 = most important Source: Gartner: Solutions Outsourcing Opportunities and Threats, Bruce Caldwell, Nov 19, 2001

According to another survey conduct important reasons for outsourcing are to save money, improve service, focus on core business, and access outside expertise as indicated on the right. Although cost reduction remains a top reason to outsource, this survey shows that there are other critical

Figure 5: Reason Differ for Outsourcing



<sup>13</sup> Gartner Dataquest. (November 2001). Solutions Outsourcing: Opportunities and Threats

14 Howard M. Lackow. (March 2001). IT Outsourcing Trends. The Conference Board

reasons that companies consider. The Conference Board comments that compared to the previous survey, the relative importance of saving money has dropped and within the next two years efficient service delivery and skilled labor shortage will replace it as the primary reasons for outsourcing.

## III-1-2. Scope Varies

The following is the Gartner survey showing the type of solutions companies want to outsource now and in the near future.

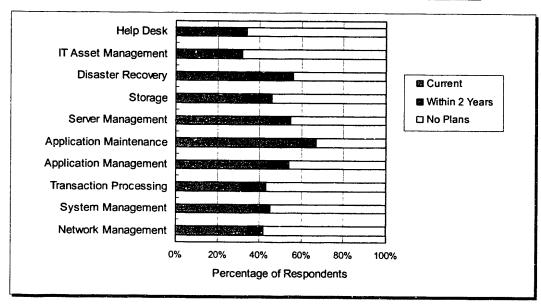


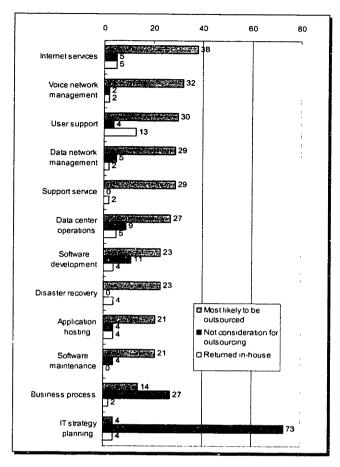
Figure 6: Solutions Outsourcing Services Now and in the Future

Source: Gartner Dataquest (November 2001)

The result indicates that the type of IT services which enterprise users want to outsource vary from company to company. Application maintenance is the most common reason that enterprises outsource at the moment. Business continuity/disaster recovery is the most popular IT function that companies seek to outsource within the next two years. Considering the timing (November 2001, two months after the September 11<sup>th</sup> event) with which this survey was conducted, it can be assumed that many companies responses reflected heightened concerns about business continuity and disaster recovery.

The aforementioned Conference Board's survey also shows the scope of outsourcing plans in the near future. This indicates that strategic and planning activities are least likely to be outsourced; in fact, a reversal of a few strategic planning outsourced efforts has been noted. Respondents cited this function as key to the business, key to the company's success, thus it was too strategic to be outsourced. The Conference Board comments that although user support is most frequently brought back in-house, this is happening to only specific call center functions. Software maintenance is the only outsourced function never brought back in-house.

Figure 7: Outsourcing Plans



In addition, the survey shows that companies consider the following points important criteria when they select outsourcing providers (listed by order of importance).

- 1. Proven track record
- 2. Guaranteed service levels
- 3. Process specialization
- 4. Guaranteed cost savings
- 5. Resource/transition strategy
- 6. Corporate culture
- 7. Ongoing training

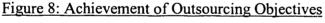
- 8. Strong governance
- 9. Centers of excellence
- 10. Industry specialization
- 11. No conflict of interest
- 12. Research & development programs
- 13. Other

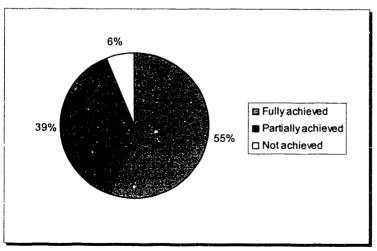
A remarkable point from this result is that "price" for the service is not listed as priority criteria. Although guaranteed cost savings is the 4th most important criteria, most companies consider proven track record and service level more critical. This seems to be a reflection

that the nature of IT outsourcing service business is fundamentally different from hardware resale business, in which service differentiation is difficult and price tends to be generally top-ranked criteria.

IT providers must realize that what existing and potential clients are seeking today is no longer just cost reduction, but broad range of scope, including the ability to understand client's strategic needs for outsourcing and to create a partnership with them. Because the cooperative relationship between providers and users needs to last several years in most outsourcing contracts, the client expects outsourcing providers to become partners who share mutual interest rather than just provider relationship, as is the case with commodity product resale businesses. With increasing exposure to IT outsourcing services, enterprise users have become more experienced and therefore more critical when they evaluate and select providers. Enterprise users now understand the inadequacy of detailed contract or guarantee clauses when unexpected events occur after the service has commenced. Users are coming to consider much more important to achieving their business goals, the provider's project management skills, faithfulness, and ability to foster good partnership.

#### III-1-3. Customer Satisfaction and Problems





According the Conference Board survey, 93% of the executives who responded to the survey reported outsourcing some IT or business process functions. 55% were fully satisfied with the outsourced services while 39% considered the effort partially successful. 97% reported they would outsource again, but with increased attention to service

levels, contract flexibility, competitive bids, contract structure and governance.

The survey also shows that problems most frequently mentioned with outsourcing efforts are attributed both inside and outside the organization. Lack of contractor performance tops the list of dissatisfaction.

Figure 9: Commonly Encountered Problems

	Contract Problems		Performance Problems
•	Lack of performance/service guarantee and	•	Service delivery/performance
	level	•	Lack of vendor flexibility
•	Differing interests between outsourcer and	•	Cost containment
	company	•	Staff turnover
•	High staff turnover (outsourcer and	•	Knowledge/depth of staff
	company)	•	Account management
•	Unclear contract		
•	Lack of flexibility as company business		
	needs change		
•	Increased costs		
•	Lack of contract governance by company		
•	Length of contract (too long)		

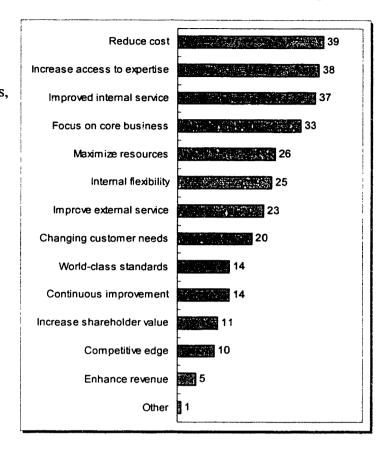
Loss of control, organizational resistance and questionable performance are the most frequently identified internal barriers to outsourcing. Lack of experience in outsourcing and inadequate planning together comprised a near equal barrier among respondents.

## III-1-4. Users Seek Continuous Improvement

When it comes to the ranking of company benefit received as a result of outsourcing, reduced costs remains in the No.1 position (Figure 10). Yet, similar to the primary reasons for outsourcing discussed earlier, increased access to expertise, improved internal service, and focus on core business are almost tied in the ranking. This result is consistent with the responses to a question asking respondents their primary reason for outsourcing (i.e. expectation from outsourcing) and thus reasonably explains that 55% of outsourcing users are satisfied with the results.

In comparing the survey conducted in 1995, the Conference Board found greater acceptance of outsourcing, maturing greatly in the last five years to include business processes, application hosting and internet services. IT outsourcing now far exceeds all other corporate function outsourcing, such as administration, finance, marketing/sales, and human resources. Outsourcing of user support, voice and data network management and data center operations has increased dramatically.

Figure 10: Benefit from Outsourcing



Despite their satisfactory

experience, respondents to the survey cited lessons learned from their outsourcing included: paying more attention to service levels, ensuring flexibility in contracts to meet changing business needs, using a competitive bidding process, and paying more attention to the contract and contract governance. "TBD" (to be determined) written within a contract is sure to create conflict after the agreement is signed.

## III-2. MIT Project Group Survey Findings

Our project team conducted an independent survey that resulted in 19 completed responses out of approximately 100 dispatched questionnaires. The objective of the survey is to understand demand for IT outsourcing services in support of various IT functional areas. The pool of respondents was given a set of questions (see Appendix) that sought to further examine their use of IT outsourcing.

Details about the survey are as follows:

- The survey was designed in January 2002 and distributed via the Internet and postal mail in February and March 2002.
- The sample was selected from the pool of companies for which MIT Sloan alumni work and members of the Interex group.
- Although the number of respondents is unfortunately much smaller than we initially expected (return rate is around 15%), a broad range of industries were represented including aerospace, manufacturing, healthcare, financial service, IT service, and education. The size of these firms varied from Fortune 500 to mid-size companies.

## III-2-1. Companies are Mostly In-sourcing

Interestingly, most firms that responded to our survey said that they are still primarily internally managing their IT system issues. In addition, many of them don't expect to dramatically switch over to outsourcing services in the near future. This means that, contrary to the general perception in the industry (e.g. Gartner Group and The Conference Board), companies are still trying to manage their IT functions internally.

However, at the same time, 80% of respondents reported currently using outsourcing services for particular IT areas/functions, and they see certain value for using such services. It can be assumed that companies recognize the difficulty of managing full outsourcing services for a long period. Large-scale outsourcing is a "high-risk, high-return" project. Given the disastrous downside risks, unless companies have an emergency situation like Continental Bank had or top management makes a critical decision like Eastman Kodak, large-scale outsourcing cannot easily happen. No matter how much information technology evolves, whether an outsourcing project can succeed, heavily relies on the human side of technology management and organizational behavior. The results from our survey seem to reflect managers' intuitive understanding of the difficulty that two independent organizations find when attempting to collaborate together on a single project.

#### III-2-2. Proven Track Record is Decisive

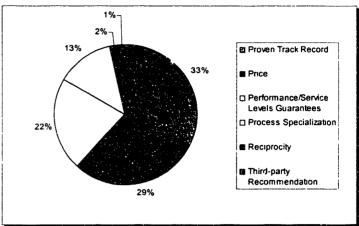
of outsourcing provider generally aligned with the results from other research institution surveys.

Proven track record, performance/ service levels guarantees, and price are the top three criteria which most companies consider important. This shows that

enterprise users understand the

On the other hand, selection criteria

Figure 11: Top three criteria to select IT Service

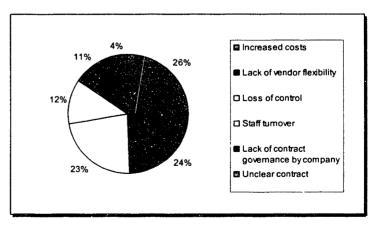


risks in selecting IT service providers based upon price or service reciprocity. Because IT outsourcing service is not a commodity service but significantly affects an organization's overall business performance, selecting a provider by reciprocity could be quite dangerous. Outsourcing services are not only built—to-order but also tailor made; as a result, it is difficult to measure service performance before entering a contract. Thus, proven track record is one of major sources of evidence to support customer decision-making. In addition, performance guarantees could provide enterprise users with a way to hedge potential risks and attain some degree of peace of mind.

#### III-2-3. Cost Reduction Remains #1

As to the benefit of using IT outsourcing services, our MIT survey revealed that cost reduction remains the top reason for outsourcing. Yet, maximized resources and focus on core business are ranked as the next two most frequently cited benefits resulting from outsourcing. This

Figure 12: Top three problems encountered



result appears to be consistent with the sluggish U.S economy, which has made cost reduction a primary concern for managers. It appears that this trend is temporary and once the economy has begun recovery, focus on core business and increased access to expertise are likely to take over the first place position currently held by cost reduction.

#### III-2-4. Increased Cost Problem

The survey question regarding problems encountered by respondents as a result of outsourcing provides us with interesting results. While companies expect cost reduction as a major benefit of outsourcing, many experienced the opposite, though no exact figures were indicated. Therefore, it is not possible to conclude that outsourcing efforts always lead to increased costs. Another problem described by respondents was a lack of vendor flexibility or loss of control. This seems to be a more serious shortfall for companies who are considering expanding outsourcing efforts or who are considering a switch to comprehensive outsourcing. Given the nature of outsourcing – using external resources to help company focus on its core business – loss of control is a thorny issue. This shortfall in expectation may arise from an inability of enterprise management to relinquish dictation of how services are provided rather than what level of service must be delivered. This survey result highlights one of most difficult issues in current IT outsourcing – how to strike a balance between delegation and control. We believe that there is no simple answer to this issue and the best solution can differ from business case to business case. We discuss possible solutions to this issue in chapter 4.

## III-2-5. Survey Observations

Overall, our survey showed similar trends to those identified by other industry surveys:

- 1. IT outsourcing is stepping up from a department-level functional issue to a corporatelevel management issue
- 2. Companies understand that the best price doesn't mean the most satisfaction
- 3. Lack of provider's flexibility is a common problem.
- 4. Maintaining governance is critical to maximizing benefits.

Conducting our own survey made us realize that obtaining objective results is not easy. Not only does this learning lie on the low return rate of questionnaire, but also on lack of control as to who answers the questionnaire. System outsourcing could be a sensitive issue in terms of job security. Yet, corporate IT staff, such as senior managers in the IT department, answered most of our surveys. From their point of view, outsourcing the IT function equates to their (and their subordinates) potential loss of their jobs. Thus, the survey responses could be skewed toward negative views of future outsourcing possibilities or benefits. For example, one of the respondents commented, "Having dealt with an outsourcing provider for the past three years, I don't see any value to this strategy for a company." This is a comment from an IT manager working for the one of the largest manufacturing companies in the U.S.

#### III-3. Future Trends

In this section, we attempt to identify for the next three or four years, the future of the IT outsourcing market. We will also discuss how corporate users approach the issues when they make a decision for IT investment including IT outsourcing.

## III-3-1. Strategic Importance Will Increase

In his book, Intelligent Enterprise<sup>15</sup>, Quinn says, "[a]s strategists carefully develop a long-term focus around those selected knowledge or service based activities the company alone can perform best, and as they aggressively upgrade or outsource those where it cannot excel, they create a much more precise and enduring strategic focus for the company than product-oriented strategies can achieve". This articulates the fundamental concept of outsourcing strategy regardless which part of corporate function is considered be outsourced. We believe that this basic principle will not change no matter how much information technology evolves. Companies should apply this principle as a bottom line when they make a strategic decision as to whether outsource or in-source their IT functions.

Although the downturn in the economy and the events of September 11<sup>th</sup> are forcing companies to put a higher priority on reducing IT budgets, the fundamental trend of outsourcing still remains unchanged, that corporate users are becoming more sensitive to the

quality of service delivery rather than the cost. In other words, companies are looking for the solution that allows them to focus on and leverage their core competence to achieve their business goals. Cost reduction is still sixth in importance according to the aforesaid survey (Gartner 2001), and this will stay in one of primary reasons for outsourcing in the future as well. Yet, primary drivers have now become:

■ Access to critical skills ■ Quality of service

■ Speed ■ Scalability

The skill shortage and business imperatives will force users to pay premium prices for the most important objectives, filling the gap between IT strategy and available internal resources.

As IT outsourcing becomes more critical to the company's business strategy, the risk of failure of outsourcing becomes larger and increasingly fatal to the company under fierce global competition. Because outsourcing service is intangible and heterogeneous, it is very difficult for users to estimate the service level at the time of contract. Thus, often users are disappointed by the result or performance that outsourcing vendors provide. Nevertheless, increasing significance of information technology will keep forcing companies to choose outsourcing. Not only is information system complex, costly, and unstable, but its underlying technology is evolving with amazingly fast speed; it is not efficient to manage IT issues without using external resources. Taking above into consideration, we believe that the future IT outsourcing demand would be supported by the followings reasons:

- 1. Cost to maintain information technology systems continues to increase
- 2. Number of users using outsourcing service continues to increase
- 3. In-house IT system staff will have difficulty maintaining pace with the speed of technology innovation and highly specialized expertise
- 4. Companies would become more aggressive in the use external resources to access the latest technology and speed of development

Corporate managers need to realize that solid strategy is indispensable for IT management to differentiate their services from competitors or to effectively support day-to-day business operation.

<sup>15</sup> James Brian Quinn. (1992), Intelligent Enterprise, The Free Press

IT outsourcing doesn't completely free companies from IT management burdens. This seems contrary to the original concept of outsourcing, which allows companies to focus on core business by letting experts manage the other non-core elements. However, a company still needs to have sophisticated skills to select and manage outsourcing partners, and to maintain a high degree of collaboration with IT providers. Because, effective IT outsourcing needs detailed inside information from user management, strong commitment and support from management is necessary. As IT systems penetrate into every business operation in companies, corporate users are seeking outsourcing partners who have sufficient capability to understand not only technical issues, but also business and management issues.

Because IT strategy and business strategies have become more and more integrated during the past decade, corporate user's expectation of IT outsourcing has shifted from merely reducing cost to creating business value. This means that companies are utilizing external technology, which enables them to create new business models, differentiate services, and transform organizations into more flat structures. In addition, increasing computing power, bandwidth, and the recent growth of the Internet have made outsourcing offer speed to market and scalability. The following diagram shows how the value preposition of IT outsourcing has changed since the 70'.

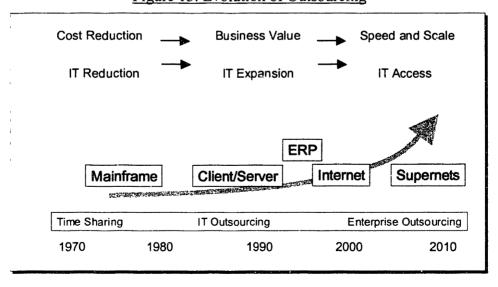


Figure 13: Evolution of Outsourcing

(Source: Gartner Dataquest)<sup>16</sup>

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<sup>&</sup>lt;sup>6</sup> Rebecca Scholl and Allie Young. (2001 January). A Future View for BPO. Gartner Dataquest

### III-3-2. Outsourcing Trend Under Weak Economy

Despite a recent weak economic environment, we anticipate that the potential demand of IT outsourcing by corporate users will continue to be strong due to the following reasons.

- Continuous market pressure to maintain high profile in financial ratios
- Business environment will remain competitive
- Fast growing e-business requires scalable infrastructure
- Security needs of heightened importance

With the advent of the 2001-2002 economic downturn, personal and corporate soul-searching have since resulted in a more conservative approach to business planning and investment, extending to information technology investments. In past tough times, innovative companies such as General Electric have countered the rest of the market and boldly moved to gain substantial advantage and market share while competitors hesitated and hunkered down to survive immediate uncertainty. Such strategic thinking in the face of economic difficulty must follow the hallmark of good strategic management. While competitors hesitate, the focused company can seize opportunity to bond the customer to the firm, and its products and services.

Gartner Group predicts information technology buyers in 2002 will begin to expect returns on IT investments be realized within 12 months, that corporations will require comprehensive risk and success probability evaluations, and the industry will witness a shift from capital spending to operating budget spending. While the Gartner Group predicts behaviors may turn toward more conservative trends, we believe corporations should have demanded disciplined investment processes all along to be proper stewards of shareholder funds. With the increased vigilance expected of boards in the aftermath of Enron's melt-down, CEOs can be certain more solid business cases for substantial investments will be required in the future, with substantially shorter amortization schedules.

#### III-3-3. Infrastructure Investments

In the next few years, companies will look to ensure they have adequate contingency planning for the continuance of business operations in the event of an emergency. This should include alternate systems sites and work space. The events of September 11<sup>th</sup> may be the catalyst for more liberal corporate acceptance of alternate work sites such as home-based offices, and mobile means of connection to enterprise systems and data. More widespread acceptance of employees spending some days at home will require additional investments in hardware and secure, remote access capabilities. To ensure availability of work files regardless of location, we will see accelerated deployments of web-based knowledge management systems to include document management, records management, work-flow and a variety of collaborative tools.

These investments can be financed as an investment from the firm, or can be considered operating expenses and funded by SBUs. A less expensive and more financially predictable means of acquiring these services is through the use of application service providers. Wildly billed as the hot trend of 2000, significant shake-out and consolidation of the numerous players in the market has occurred with the slowing economic conditions. Service providers have been able to leverage economies of scale to attain the best security talent and state of the art facilities capable of meeting continuity and security features discussed above. Their economies of scale allow service providers to pass some of the operational savings on to the customer while making a reasonable profit. Yet the real savings to a company arises from the avoidance of capital investments needed to develop such capability on its own.

# Chapter IV. Best Practices

In this chapter, based on the historical cases and industry surveys explained in the previous chapters, we will discuss the best practices for strategic IT outsourcing which can bring a corporate user successful business results. The information technology function has been recognized as one of the most difficult areas to outsource because of its increasing complexity of system dynamics; in fact, IT outsourcing is often mismanaged and users are frequently disappointed by the under-performing results after spending substantial sums of money.

To facilitate a firm's successful outsourcing effort, we have developed the "IT Outsourcing Decision-Making Framework" which demonstrates the theoretical decision process that enterprises should follow. The framework consists of four fundamental steps of: (1) Establishing business & IT strategy (2) Process engineering (3) Provider selection (4) Execution and governance (please refer to below diagram).

Design Process Engineering Provider Selection

Business & IT Strategy

Execution Implementation

Figure 14: IT Outsourcing Decision-making Framework

These cyclical processes result in the accumulation of evolutionary outsourcing expertise derived from previous activities and delivers improved returns on subsequent outsourcing investments. We will explain each of the four processes.

### IV-1. Business & IT Strategy

Research on successful large-scale outsourcing cases and industry surveys, shows that a strong alignment between long-term corporate strategy and IT strategy is quite essential for effective IT outsourcing. Merely focusing on cost reduction or other shortsighted issues could bring disastrous outcomes in the long run. To help firms avoid this undesirable fate, we introduce the first of the IT outsourcing decision-making cycles, the business and IT strategy process.

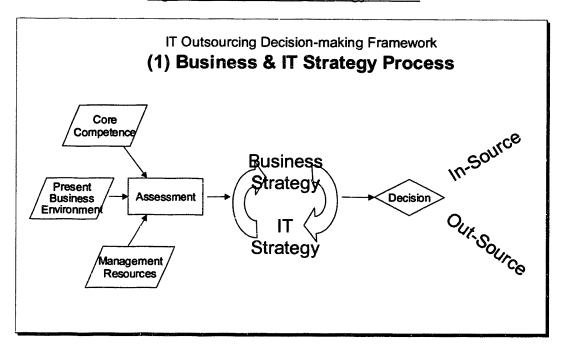


Figure 15: Business & IT Strategy Process

# IV-1-1. Strategic Synergy Needed

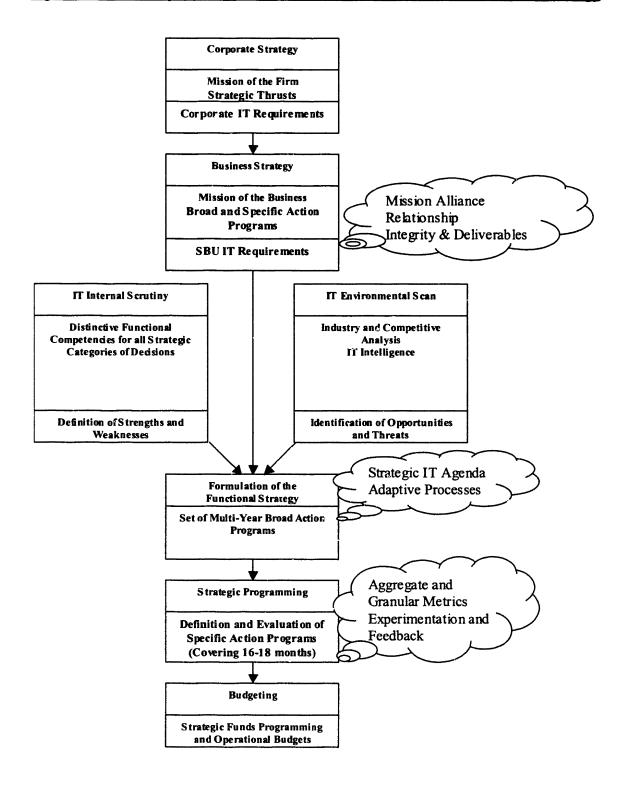
Since corporate and business strategy drives the various resources of a firm, we begin by discussing the essential link between corporate/business strategy and IT strategy, and how this link influences the outsourcing decision process. Because IT no longer stands alone

within the company as a function but is ubiquitous with all functional activities of the firm, IT strategy must be synergistically aligned with these activities as the true enabler of sustainable business growth.

Hax & Majluf<sup>17</sup> identify that of the three organizational levels of strategy development – corporate, business, and functional – the functional dimension is the most neglected in American business. He goes even further to attribute America's decline on global competitiveness in the 1970s and 1980s to this neglect. To demonstrate the synergistic alliance among corporate, business, and functional strategy, we would like to present his framework, Hax and Majluf's Fundamental Elements of the definition of Business Strategy, as this clearly explains the sequential process of how corporate strategy formulates business strategy and eventually develops into functional dimensions.

As an output of the corporate strategy development, the mission of the firm and central identification of strategic thrusts identify the required functional capabilities to successfully develop competitive advantage. At the business strategy level, Hax & Majluf say that the functional implications of the strategic thrusts become even sharper and more detailed. The business strategy contains a set of well-coordinated multifunctional programs aimed at creating or reinforcing the competitive standing of the business. In the formulation of business strategy, then, all critical functional support requirements are established. As with all functional strategies, IT strategy must be synergistic with the business strategy it intends to support.

Figure 16: Hax & Majluf's Fundamental Elements of the Definition of Business Strategy



<sup>&</sup>lt;sup>17</sup> Hax & Majluf. (1996). The Strategy Concept and Process

As an example of the importance of aligning IT strategy with corporate strategy, we would like to draw on Eastman Kodak's case (1988) discussed in chapter II. Kodak's concern regarding its IT function was clear in the following case quote.

"Should Kodak invest millions of dollars fixing the in-place IT infrastructure or use that money to support its core business of imaging, photography, health, and chemicals? Throughout the company, we were moving toward selling of non-core businesses and services. Why shouldn't we apply that same logic to our IT services? (Ms.Hudson, V.P Corporate Information Systems at Eastman Kodak)<sup>18</sup>"

In the late 80's, Kodak was in the process of firm-wide restructuring--redefining its core businesses and organization structure due to fierce competition with Polaroid and Fuji Film. Kodak used the same criteria that it uses to measure other businesses to evaluate its IT function such as "Is there any value in managing IT function by itself?" or "Is this a core function of the company?" The answer was "No". Yet, Kodak knew that IT outsourcing could not be a simple contractual hand-off like building facility management. They decided to craft a strategic alliance with outsourcing providers, which allowed the relationship to grow and evolve as Kodak's needs changed. Also, Kodak decided to develop a new organization structure and identify key players needed to implement the necessary organization change associated with full-scale IT outsourcing. Kodak's decision to outsource was derived from their redefining the future vision for the IT organization and their scenario of how to make it happen. Importantly, Kodak's IT restructuring project was sponsored by senior management, including the CEO, based on their recognition that IT strategy was critical for the company's ability to maintain competitiveness.

## IV-1-2. Strategic Reasons to Outsource

Looking back in the late 80's and 90's, we see two major reasons explaining why outsourcing has been a strategic choice to many enterprises in the U.S.

The first reason is the changing business environment in the U.S. As the U.S. economy matures and growth rate diminishes accordingly, the competition naturally becomes tougher

because companies try to dominate a limited piece of the industry market. In addition, more and more foreign companies from Europe, Japan, Taiwan, and China entering the U.S market make this competition even tougher. Realizing this irrevocable environmental change, U.S companies have started restructuring and re-engineering their business models and organizations in a drastic manner. This includes broad range of painstaking processes such as withdrawing from unprofitable businesses, cutting employees, eliminating organizational layers, changing cost structures, reviewing supply chain management, and reducing debt. Yet, the essence of corporate restructuring is to redefine the business domain and craft the strategy for sustainable growth by deciding what to do and what not to do. Thus, a business function deemed non-core to the organization is a function that may potentially be outsourced. In other words, outsourcing a non-core business function is quite a strategic decision that allows companies to refocus the core business and concentrate capital investment into the focusing area. Embracing outside resources by establishing a strategic alliance with providers who have the skill sets, which the company doesn't have, is a speedy and efficient means for the company to maximize competitiveness and corporate value in today's business environment.

The second reason is changing information technology. There was a major paradigm shift in information technology from the 80's to the 90's to network computing, open systems, multimedia, downsizing, and the Internet. As technology evolves, enterprise users have started shifting from proprietary systems to open/standardized systems that bring flexibility, lower cost, and shorter development periods. This shift has also brought an important change to the relationship between corporate users and IT providers. To cope with this trend associated with firm-wide corporate restructuring, large corporate users have begun revising the traditional in-source IT strategy.

Because IT outsourcing provides enterprise users with greater scalability, greater skill sets, and greater economies of scale, this fits best to most U.S companies' new management style of focusing on core competences.

Applegate, Lynda and Montealegre, Ramiro. (1995). Eastman Kodak Co.: Managing Information Systems Through Strategic Alliances. Harvard Business School Case 9-192-030

### IV-1-3. In-sourcing or Outsourcing?

In today's complex organization and volatile business environment, information technology impacts virtually every organizational function and process. Thus, the decision to outsource or in-source information systems is strategic in nature.

External providers potentially offer:

- Greater economies of scale
- Greater economies of scope

■ Greater expertise

■ Greater flexibility

Therefore, the decision to outsource should be based upon which in-house or external resources can provide better service to the organization. In other words, management should continuously ask itself whether in-house IT resource can compete with world's best service provider in terms of cost, technology, speed, and flexibility. We would like to introduce frameworks that help corporate users decide whether to outsource or in-source a certain IT function. First, to make a decision for appropriate outsourcing, a company needs to profile its current position on the role of information technology. The following table by Venkatraman (1997) is useful to this analysis.

Figure 17: Profiling the role of information Technology in Business Operations<sup>19</sup>

Cost-Center Perspective	Value-Center Perspective	
We deploy IT to overcome weakness in our current operations	<b></b>	We view IT as a fundamental driver of future business activity
We see IT as an expense to be managed	<b></b>	We see IT as a resource to be leveraged
We view IT outsourcing as a threat to our operations	<b></b>	Our sourcing strategy balances in- sourcing with outsourcing
We use one rigid criterion for assessing value from IT	<b>4</b>	We adopt multiple criteria for measuring IT value
Our IT operations reflect a captive, internal monopoly	<b></b>	Our IT operations act as a solutions integrator to business requirement

<sup>&</sup>lt;sup>19</sup> Venkatraman. (1997). Beyond Outsourcing Managing IT Resources as a Value Center. Sloan Management Review 38

Another factor a company has to take into account in the decision process is that of risk arising from outsourcing. IT outsourcing is fundamentally risky project due to the following:

#### (1) High switching cost

Unlike a transaction-based activity in which business is completed in a short period, such as procurement purchases, IT outsourcing is a relationship-based activity, which generally lasts several years (sometimes 10 years). With its long and cost-consuming preparation involving a negotiation period, designing period, and introduction period, it is not easy to terminate the outsourcing contract once the outsourcing has started. An outsourcing service is not a commodity service, but a tailor-made service for a particular organization. To find an alternative provider takes time and money. Further, users cannot immediately see performance and effectiveness results because it takes time to evaluate success. To attempt to bring a long-standing outsourced IT function in-house would take substantial investments in IT hardware and human resource recruitment, training and development.

### (2) Adequate risk assessment is required

Because information systems are important in nearly all business processes and services in an organization, the impact of outsourcing warrants senior executive attention in all functional areas. We think that the following two-by-two matrix is a practical tool for the initial screening of outsourcing risk assessment.

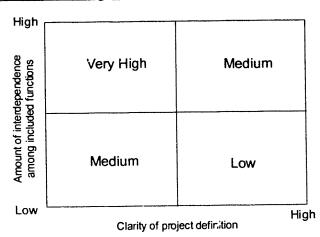


Figure 18: Outsourcing matrix - Risks based on type of project<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> Kathy Ripin and Leonard Sayles. (1998). *Insider Strategy for Outsourcing Information systems*: Oxford University Press

To evaluate the risk and cost associated with IT outsourcing, it is necessary to consider the scope of project's interdependency with other businesses/processes and clarity of definition of project to be outsourced. If the interdependency is high and the scope of a project is not clearly defined, outsourcing could be a difficult and costly move. For example, if a company tries to create a new business application (software) to increase operation efficiency, marketing opportunities, or chances of product innovation, this would be very difficult because creating such application requires cross-functional collaboration among several departments in the organization. Thus, outsourcing providers need to have in-depth understanding of the company's organizational structure, nature of business, and internal politics. Because this type of project is not merely interdependent but also difficult to clearly define, managers should reconsider the effectiveness of outsourcing the project in terms of speed, value-added, and total cost.

## IV-1-4. Business & IT Strategy Conclusion

We embrace the clear discipline of the Hax & Majluf<sup>21</sup> approach to functional strategy and will continue to employ his framework in this thesis. As an outcome of corporate, business and IT strategy development, a firm will have a specific set of multiyear broad action plans and specific action programs to be resourced. Corporate resourcing decisions follow the definition of action plans and programs. Defined corporate, business and functional (IT) strategies provide the basis for core competency determination and subsequently for a decision as to in-source or outsource IT services.

## IV-2. Process Engineering

In this section, we will discuss the essential disciplines necessary to define the desired services that fulfill a firm's information technology action plans developed in the strategic planning process. At this point, specific IT functions have been identified as non-core activity that is available for outsourcing consideration. These identified functions need to be sufficiently characterized in scope, definition and performance level in order to fully

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<sup>&</sup>lt;sup>21</sup> Hax & Majluf. (1996). The Strategy Concept and Process

understand and accurately communicate the services needed and to provide a common baseline for evaluating in-sourced and outsourced performance options.

Gartner Group (2001) points to a growing recognition of the need to align IT and business strategy has been a significant driver for the adoption of a "business focused" approach to IT, and thus, outsourcing strategies. From once being perceived strictly as a technical tool used by organizations to manage/optimize IT assets and infrastructure, outsourcing has gained a broader foothold in some organizations to encompass responsibility for the underlying IT-enabled business processes and even business outcome. Process standardization provides for more efficient use of IT, and for more consistent business operations across the enterprise. For example, in the development of a statement of work for IT security, the customer organization must not only define the process and expectations for the service, but also standardize those services to prevent a security breach via a weaker link in the enterprise network.

### IV-2-1. Why Needed?

One of the most difficult tasks for effective outsourcing is developing a baseline of services and processes used and establishing standardized business processes. It is also the most neglected task. This need forms the second element of our four critical IT outsourcing decision-making frameworks: business process engineering.

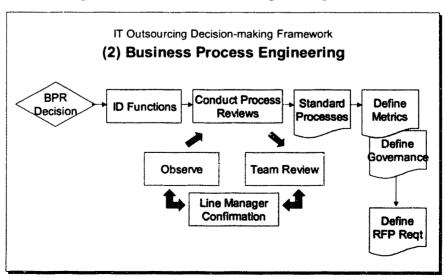


Figure 19: Business Process Engineering Process

Such standardization requires hard work and significant commitment of time and resources from business managers, but business process documentation is absolutely essential to a successful outsourcing effort. Dun Bradstreet research (2000) indicated that 22-25% of all outsourcing relationships failed after two years and 50% failed after five years. The study found that customers perceived outsourcing suppliers didn't know what they were supposed to do, cost was too high and service was poor. The correlation between documented requirements and successful outsourcing is highlighted in a Ziff Davis Media survey (2000) that revealed 30% of organizations involved in an outsourcing agreement did not have a service level agreement or equivalent detailing the project terms.

#### IV-2-2. Level of Effort

Often, firms have poorly documented or no documented processes. Further, firm's processes may vary from one strategic business unit or location to another. In order to obtain maximum efficiency and effectiveness, good processes should be replicated throughout a firm when feasible. While continuous improvement arose from manufacturing sector competitiveness, it was Michael Hammer who created the re-engineering revolution in the business world in 1990 where he suggested existing practices to improve processes amounted to "merely rearranging deck chairs on the Titanic."

While Hammer's business process re-engineering (BPR) fame centers on creating radical change in organizations, his templates provide an authoritative approach for determining a level of effort in business process improvement above the status quo. Braganza and Myers (Business Press 1997) offer the following diagram to show the relative correlation between scope of process change attempted and senior management involvement necessary to assure success.

**Methods of Business Process Improvement** Business Process Redesign, Braganza, Ashley and Myers, Andrew International Thompson Business Press 1997 page 104 Modest Radical **GOALS** Fundamental Tota process Methods of Discontinuous Re-engineering improvement Methods of SCOPE **ROLE OF IT** Continuous Simplification improvement "Business as Usual\* Task Incidental Senior Management Involvement

Figure 20: Methods of Business Process Improvement

Change is presented as a continuum ranging from incremental to radical, with increasing business leadership involvement as a firm moves along that continuum. Hammer emphasized the popular practice of improving existing processes were merely a legacy of functional silos, whose minor improvements succeed only to "pave cow paths."

# IV-2-3. The Process of Reengineering Processes

Whether a firm desires to outsource the "cow path" or to use the opportunity to substantially improve its processes, it must embark on an effort of similar structure to Braganza and Meyers BPR framework to ensure accurate representation of the services needed. For functional management, both in-sourced and outsourced activities require firms to engineer or re-engineer business processes in order to clarify the objectives of operation and standardize operational flow. Since such an effort requires investment of personnel time and effort, firms should consider the marginal additional costs to improve the processes concurrently. Outsourcing IT services to service providers without carefully reviewing business/operation processes could result in an ineffective services that are damaging to the business at potentially sustained rates of wasted resources.

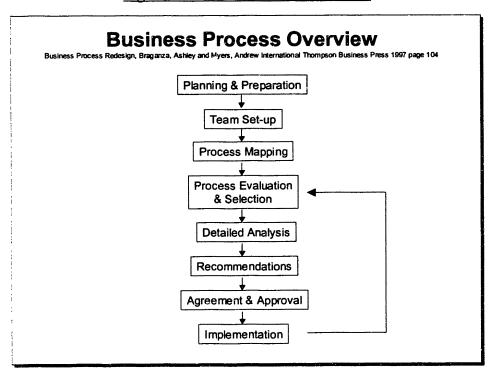


Figure 21: Business Process Overview

Braganza and Meyers offer a framework for reengineering that spans the effort from preparation to implementation. Highlights of their framework include assembling a crossfunctional team of business experts and stakeholders in the process, and equipping these members with some basics of business process engineering. Hiring a management consultant to assist in the process definition, engineering or re-engineering may be helpful; a facilitator with no stake in the outcome can encourage an open dialogue and enhance team creativity. Teams should begin with a high-level process mapping before engaging in a detailed process routine of:

- Outline the chosen process based on existing knowledge of the team
- Review with the relevant line managers to agree on the correct details
- Discuss with, and observe, the people actually doing the job

In process evaluation and selection, criteria and priority for increased scope of redesign effort were by:

- Size volumes, costs and income
- Current performance how well the process met customer expectations

- Complexity number of handoffs, bottlenecks, and the potential for simplification
- Opportunity the extent of potential increased service needs
- Scalability how well the process could meet existing expansion plans

Detailed analysis of the processes should begin with the highest priority items to ensure the greatest return on effort. In this stage teams collect management information, observe, conduct interviews and focus groups, review research data and challenge team assumptions and bias.

Ripin & Sayles (1999)<sup>22</sup> offer the following questions as stimulators to identification of processes that need reworking:

- Where are the bottlenecks and rework?
- Which processes are sources of interpersonal and inter-group conflict?
- How can the company build in tacit knowledge?
- How can data be shared to increase the speed and quality of decisions?
- How can interrelated but separate processes attain synergy?
- Where in the work flow is there too much or too little human intervention?
- How can perverse incentives be avoided?

Prior to outsourcing any activity, an organization must be able to define what it seeks to have outside service providers perform. Business requirements must be identified and quantified. The process of identifying what is accomplished within a given function or activity serves an insightful purpose for the individual and the firm. The act of creating a business model forces analysis of the existing process and usually entreats questions as to why the current method of a given business process is accomplished in such a manner. Ultimately, a company must be able to define its business process and quantify expected workload and level of acceptable performance. The absence of a standing business process blueprint and the extraordinary amount of effort needed to assemble one leads to the high frequency of contracts that are let without benefit of a reasonably defined statement of work.

<sup>&</sup>lt;sup>22</sup> Kathy Ripin and Leonard Sayles. (1998). *Insider Strategy for Outsourcing Information systems*: Oxford University Press

# IV-2-4. Process Engineering Conclusion

The process of defining a firm's processes serves many masters: the disciplined process is critical to effective negotiation with outsourcing providers; it involves business process owners in thorough analysis of the activities a firm expends resources upon; it may produce the first written guidance of operational procedure for the activity and serve to educate current and future employees; it offers firms the choice in level of effort ranging from "as-is" assumption to radical reengineering; it produces efficiencies through adaptation of standardized processes; it provides the quantification of quality, efficiency and frequency required to allow the development of outsourcing documents to include the request for information (RFI), request for proposal (RFP), statement of work (SOW), and ultimately the service level agreement (SLA).

#### IV-3. Provider Selection

Selecting appropriate service providers is fairly critical to IT outsourcing. Today, there are many IT providers from which to choose, ranging from "Big 5" accounting firms to small boutique-type system developers. The question is how to pick a suitable provider that could be the best partner, who would share the long-term strategic vision and is capable to handle the client's specific business needs. This is not an easy task due to many reasons. Because IT outsourcing is essentially a customized service which is built to order and delivered over a long-period, buying an outsourcing service means buying a product that doesn't exist at the time of signing the contract. Most companies understand that a service level agreement never guarantees future results because of the uncertainty of business and technology environments. In addition, the switching cost of IT outsourcing is extremely high, requiring a long preparation and coordination period. Thus, companies cannot apply a "trial period" or "money back guarantee" offer to the purchase. The solution to this issue is to eliminate uncertainty as much as possible before entering the contract, and therefore, select the best partner. In this section, we discuss how corporate users should negotiate the deal, select providers, structure the partner relationship.

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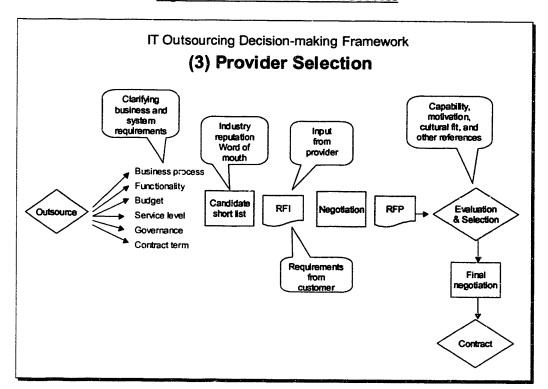


Figure 22: Provider Selection Process

## IV-3-1. Case study: BP Exploration Operating Company

To illustrate one of best practices for provider selection, we will reference BP Exploration Operating Company (BPE)'s outsourcing case. Understanding the pros and cons in both comprehensive outsourcing with a single provider and selective outsourcing with multi providers, BPE reached its unique hybrid-way to manage providers in which they could utilize best of breed technology skills with minimal orchestration overhead.

Before BEP started negotiations, they accomplished two critical activities. One was to restructure the internal IT organization by transforming several local IT departments into a single centralized department. The company standardized fragmented system specifications and control at the firm-wide level. With this internal restructuring, BPE achieved a 25% IT cost reduction even before they began outsourcing.

Once the internal restructuring was finished, BPE started pre-screening outsourcing providers by sending an RFI to more than 100 IT providers around the world. In the RFI, they briefly

but clearly mentioned their outsourcing policy and their intended scope of outsourcing. At the same time, they put forth questions asking about the provider's approach, business experience, and project management policies. Based on 65 responses, BPE carefully selected 16 candidates through rigorous internal discussions. At this point, BPE's project members visited these 16 providers to check the quality of senior management, corporate culture, strategic vision, and level of understanding outsourcing. An interesting fact is that BPE didn't negotiate prices until the very last stage, as they believed that capability and motivation to match BPE's business requirements were much more important than price. Eventually, six providers were left on the short list.

Instead of issuing normal RFPs to these providers, BPE requested that they present collective proposals by collaborating among each other through a weeklong workshop. This was a good way to determine which provider could collaborate best with other providers. This is because BPE wanted to use two or three providers to collectively work together as if they were a single provider on its outsourcing project. Finally, one proposal was selected from among five proposals, which was authored by three companies, Sema Group, Science Applications International Corporation, and Syncordia (a subsidiary of British Telecommunication). Although not everything went smoothly in the project, the overall outcome of this outsourcing was quite fruitful, resulting in the reduction of BEP's IT staff by one fifth and total IT cost reduction from \$360 million in 1989 to \$182 million in 1994. BPE's prudent provider selection method appears to be one of the major reasons for this success.

#### IV-3-2. How are Providers Selected?

The literature review and our survey showed that the primary criteria people use for selecting the provider is proven track record. It can be assumed that this is a reflection of the client's perception that the contract doesn't guarantee the outcome. No matter how prudently a company may craft a contract, it is quite rare that all described contents are perfectly executed by both parties. When unexpected events occur during the contract period, both provider and client are required to react in a realistic manner rather than simply stick with the contract. Given the inevitable uncertainty in IT outsourcing projects, it is much more

important to find a highly motivated provider with whom the client can create a long-term partnership. Since this kind of factor cannot be easily quantified nor can a provider's sales pitch be taken as trustworthy in most cases, using a provider track record as one of measures of provider's capability appears sound.

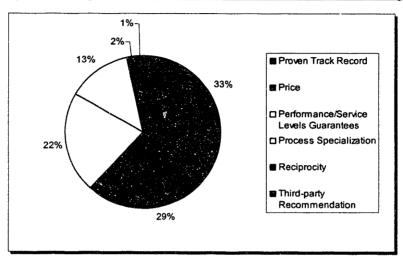


Figure 23: Top three criteria to select IT Service – MIT Survey

Our survey also revealed that the second popular criterion is price. That price is in the No.2 position is likely to be due to the downturn in the economy, which has led most companies to review their business models and cut costs. The third criterion is performance and service level guarantees. It is clear that corporate users consider the performance of outsourcing uncertain and are looking for something to fall back on as a last resort.

#### IV-3-3. RFP Deesn't Guarantee Success

Many companies believe that a deliberately crafted request for proposal (RFP) will provide them with the transparent view of provider's services levels and enable them to compare proposals from different providers on an equal basis. Yet, reality is not that simple. An RFP is essentially a client's wish list and providers tend to accept an RFP as is in order to win the contract, even though providers realized some pitfalls or excess quality requirements were evident in the RFP. Thus, in many cases, the system requirements described in an RFP are not optimized and may be heavier than what clients need to achieve their objectives. Thus, too much reliance on an RFP could make the project unnecessarily costly or complicated.

To avoid this situation, before creating an RFP, a client should communicate with potential providers and ask for advice to optimize system requirements that accurately reflect the firm's business needs. Because each provider proposes different ideas or solutions to address a client's needs, it could be dangerous to simply compare RFP responses without having sufficient communication with the providers.

To effectively address this issue, some companies are using a relatively new methodology called a request for information (RFI).<sup>23</sup> RFI is a more informal and flexible way to gather information than an RFP because an RFI process is a brainstorming-type discussion between client and provider seeking the best solution for both parties. Through the RFI process, a client can also check provider motivation, communication skills, and business experience. If possible, a company should hire independent consultants to evaluate provider proposals and competencies. To hedge the risk of entering the contract with an incapable provider, this option is worthy of consideration. These specialists are exposed to a vast array of outsourcing deals and are able to learn from the many observed successes and failures. Outsourcing experts know what has been agreed to in previous contracts; with this information, they can bargain hard for accompaniments that were granted in previous outsourcing deals. In addition, an outsourcing specialist can be helpful in collecting an objective baseline view of customer satisfaction levels, requirements, service levels and response times necessary to write an accurate RFP. Also, meeting with a provider's project manager who is going to be in charge would give a client a firsthand image of what they are paying for.<sup>24</sup>

## IV-3-4. Partnership versus Subservience

IT outsourcing generates a highly complex business relationship. Contrary to initial intentions of clients, some outsourcing relationships are strained by inappropriate attitudes toward providers. To make outsourcing effective and beneficial, companies need to develop

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<sup>&</sup>lt;sup>23</sup> Preston Dodd. (2000). Jupiter Media Metrix

<sup>&</sup>lt;sup>24</sup> Tom Field. (Jan 2002). CIO-In and Out of Outsourcing

a partnership mentality with an IT service company and work to structure the relationship for long-lasting benefits with expected levels of service, efficiencies, and cost savings.

Despite the best intentions of both customer and provider, potential pitfalls exist for those who do not engage in due diligence and interactive communications. Three elements are critical to success. First, the service provider and the client must agree on a well-defined statement of work (SOW). Second, both parties must select the proper liaisons to manage day-to-day interface. Finally, both the service provider and client must establish a plan of communications that includes regularly scheduled meetings and clear reporting mechanisms.

It is critical that the service provider have a strong point of contact within the customer organization that authoritatively represents the client. Both parties marketing the success of the other will best serve the relationship. The customer representative must convincingly expound the merits of the company's outsourcing decisions to internal audiences and ensure the cooperation and support from internal employees. The service providers should strive to make the customer advocate excel in their responsibilities. These attitudes, coupled with excellent performance provides an ideal win-win relationship. Partnership support for a win-win relationship is the key to a long-term engagement as changes to the statement of work and service level agreement become necessary due to changing environment, technologies, and business needs.

The Endeavour Outsourcing Matrix (1999)<sup>25</sup> presents the following framework that provides outsourcing users with universal guidelines to structure an appropriate partner/vendor relationship with providers.

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<sup>&</sup>lt;sup>25</sup> Endeavour Business Learning. (1999). CA

## **Endeavour Outsourcing Matrix**

	4. Facilities Vendor	3. Delivery Vendor	
Standalone	Characteristics  Provides company services Performs standalone business activities Manages own operations	Characteristics Delivers to customers, account, staff Performs standalone business activities Manages own operations	
	Examples  Travel agency Employee software training Web/application hosting	Examples  • Fulfillment house  • National service provider  • First level call center	
	Value  Reduce operational issues or costs	Value  • Leverage vendor's operations	
	Selection Priorities  Cost-effectiveness Responsiveness & reliability	Selection Priorities  Reliability & service level Customer satisfaction	
	Actions for Success  Provide current service requirements  Create service level agreement  Monitor value for service provided	Actions for Success  Provide current product information  Create service level agreement  Monitor customer satisfaction	
Integration with the Business regarded	1. Team Partner	2. Delivery Partner	
	Characteristics  Works on company operations  Works with employees  Participates in decisions & meetings	Characteristics Delivers to customers, account, partners Works with employees Participates in decisions & meetings	
	Examples  Contractor on project feam Product launch project manager Business consultant (e.g., TQM)	Examples     Systems integrator VAR     Product sales trainer     Enterprise account technical support	
=======================================	Value  Use cost-effective expertise as needed	Value  Augment in-house capabilities	
a -	Selection Priorities  Team cultural fit, adaptability Grasp of company business & priorities	Selection Priorities  Must "look & feel" like company  Knowledge & expertise	
	Actions for Success  Provide accurate, detailed briefing Treat as a full team member Ensure "ownership" of outcomes	Actions for Success  Give orientation, training & information Treat as an equal partner Ensure "ownership" of outcomes	
	Lally Integrated	Characteristics  Provides company services Performs standalone business activities Manages own operations  Examples Travel agency Employee software training Web/application hosting  Value Reduce operational issues or costs Selection Priorities Cost-effectiveness Responsiveness & reliability Actions for Success Provide current service requirements Create service level agreement Momitor value for service provided  1. Team Partner  Characteristics Works on company operations Works with employees Participates in decisions & meetings  Examples Contractor on project team Product launch project manager Business consultant (e.g., TQM)  Value Use cost-effective expertise as needed Selection Priorities Team cultural fit, adaptability Grasp of company business & priorities Actions for Success Provide accurate, detailed briefing Treat as a full team member	

Internal delivery

External activery

#### Recipients of the Services

Depending on the integration level between business and function being outsourced, the relationship changes between partner and provider. In a partnership, client and provider seek a long-term and stable relationship so that they can enjoy the mutual benefits aligned with their long-term business strategies. On the other hand, in a vendor-type relationship, both

parties expect a relatively shallower and more short-term relationship. The following identifies the each concept of four relationship forms shown in the matrix.

- 1. **Team partner** External resources and expertise are brought in to work internally within the organization. This is the most integrated with company's function and decision-making. Many IT projects use this form of outsourcing.
- 2. **Delivery Partner** External party provides integrated solutions or delivers strategic information on company's products to customers, as part of the overall marketing and product definition.
- Delivery vendor -- The delivery of service or product to the customer is contracted out and completely handled by an external agency. Outsourced functions may include merchandise fulfillment, technical support and national service providers for company products.
- 4. Facility vendor An internal service or function is contracted to an external agency. Of the four, it is the least integrated with company functions and decision-making. Examples include a building facility management service.

As shown in the Endeavour Outsourcing Matrix, each of these forms has a particular value that is added through the outsourcing approach. Each form has strategic priorities that relate to the business objectives for the task, although in recent IT outsourcing projects, the "team partner" form is becoming the mainstream. When evaluating resourcing options and making a decision to outsource, it is important to take into account the nature of the function, the context in which it will be done, and organizational and personnel impacts on implementation plans. Using this matrix can be a useful guide and starting point.

### IV-3-5. Provider Selection Criteria

Because it is impossible to anticipate all events and environmental changes which might occur over the next several years, any IT outsourcing project embraces uncertainty.

In fact, once the project has started, unexpected problems tend to happen in the area where the agreement doesn't specify who is responsible or who should bear the cost, creating a dispute between the client and the provider. Therefore, the motivation and business discipline of the provider are key for successful outsourcing. The following criteria can help

select an outsourcing provider with whom the client can establish a long-term partnership, according to Kathy M. Ripin and Leonard R. Sayles (1998).

- Motivated providers keen to understand client's business operation and workflow.

  These providers recognize that understanding a client's business is a fundamental point to start a project. Since almost no outsourcing project is completed without problems such as revision of the original plan, environmental changes, or other organizational issues, if the provider seems to suppose a project can be perfectly completed along with the contract, that provider may be naive.
- Although track record is an important measure to select a provider, it is not everything.

  Because every project has unique conditions and the business environment changes from time to time, selecting a reputable provider without checking the background of success could be risky.
- Sincere providers tend to give a client good advice even before entering the contract.

  Because they believe that a long-term relationship cannot be created without mutual trust, those providers point out pitfalls or unnecessary requirements on the RFI or RFP by proposing unique or better alternative solutions.
- Confident providers are willing to provide clients with opportunities in which clients can ask questions or consult on issues before a project starts. Confident providers understand that sales people are not able to provide in-depth technical information that clients may want to check on in advance.
- It is more important that client's specific outsourcing needs match with a provider's long-term growth strategy and marketing strategy. A provider's motivation to collaborate with clients also depends on which business area the provider wants to expand as a profit center. Therefore, if a provider sees strategic value in taking a part in the project, its motivation becomes even stronger.

It is important to point out that all the above checkpoints are qualitative and are not easy to check without actually investing substantial time to communicate and interact with providers. Yet, following a proven selection methodology is critical, and corporate users should invest adequate time and effort to screen providers before reaching a final selection. The following two-dimensional diagram by Jupiter Research (2000) shows the relationship between a firm's

ability to assess service provider competence/capability during the evaluation process and its impact on project success. This diagram can be useful to the client to decide how much time and effort the client should spend to check each competency during evaluation period.

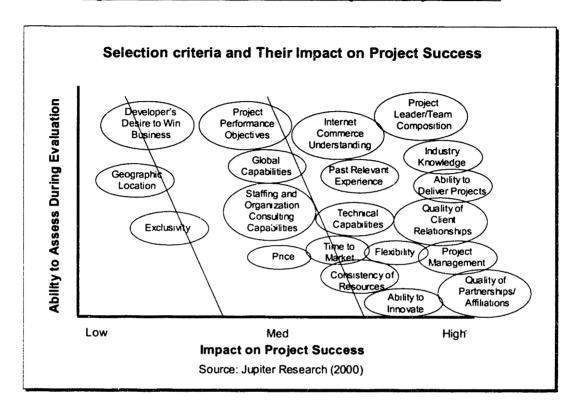


Figure 25: Selection criteria and Their Impact on Project Success

## IV-3-6. Crafting the Agreement

Service-level agreements (SLA) are best written with the assistance of an experienced IT manager who will be responsible for the successful performance of the contract. Further, for larger companies it is advisable to maintain talent on board, capable of accurately assessing the service metrics required and received from the service provider, and assuring seamless transitions during contingency operations. This talent can be employed in strategic IT consultation during routine operations.

In drafting outsourcing contracts, one should structure 1-2 year durations (shorter is better) with clauses for renegotiation of the existing contract upon expiration. Exit strategies should be negotiated in advance, for easy transitions in case of service dissatisfaction or other

contingency. Shop for firms that already have documented, standardized processes for similar operations. Further, by keeping utility contracts separate from strategic project contracts, additional incentive exists for the utility provider to perform well if they are positioned for first refusal in separate, project-based contract work. Again, the environment created is one of encouraging value-added capability to the client company, to the benefit of both parties.

#### IV-3-7. Provider Selection Conclusion

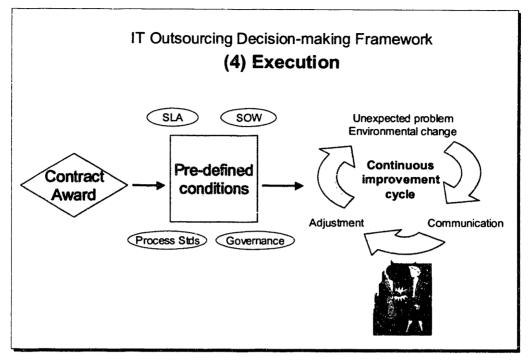
As we discussed above, the success of IT outsourcing is decided by many factors, but selecting a right provider is one of most important. Given the nature of IT outsourcing, enterprise users as buyers have to remember: (1) switching cost is very high, (2) lock-in effect is very strong, (3) contracts don't guarantee satisfactory results. Perhaps selecting the right provider as a long-term partner is something similar to finding the right spouse for your life. Because mutual trust and partnership matter in IT outsourcing, qualitative competencies, such as communication skills, management style, motivation, and cultural fit have the same degree of importance to the success as do technical expertise and experience.

It is clear that there are no short-cut rules to find the best outsourcing partner because: (1) every outsourcing project has unique objectives and background, (2) every organization has a different culture and structure, (3) ever changing technology and business environments always create great uncertainty. Thus, corporate users must go through time consuming and painstaking selection processes, but such efforts eventually contribute to minimizing the risks and maximizing the effectiveness of an outsourcing arrangement.

#### IV-4. Execution

We've discussed at length in earlier chapters the essential link between the business and IT that must be carried into the successful outsourcing agreement. In this chapter, we will discuss the best practices in good governance, and the accountability associated with it as presented by Marc Epstein and Bill Birchard (Counting what Counts). We will link Epstein and Birchard's model to our fourth outsource decision-making framework: execution.

Figure 26: Execution



### IV-4-1. Execution Governance

With the substantial task of contract award completed, a new set of skills must be employed to facilitate a successful process of execution. Operational activities have a proclivity toward deviation from even the most well written plans. Sometimes deviation is necessary and good, but deviation should never result from inattention. Because no SLA can anticipate and cover all contingencies or evolving business needs in the future, after contract governance is very important. Governance includes the maintenance of adequate partnerships and timely service level adjustments according to evolving businesses.

Dr. William Boyd, NCI Information Systems, explains both provider and client have an obligation to maintain a clear bilateral definition of the roles and responsibilities of both the service provider and the client to facilitate clear communications.

Communications with all client's stakeholders and the outsourcing team are regular and consistent;

- All appropriate parties are included in the communications process; and
- Information is shared between the relationship managers to ensure that decision-makers and stakeholders have access to the same information.

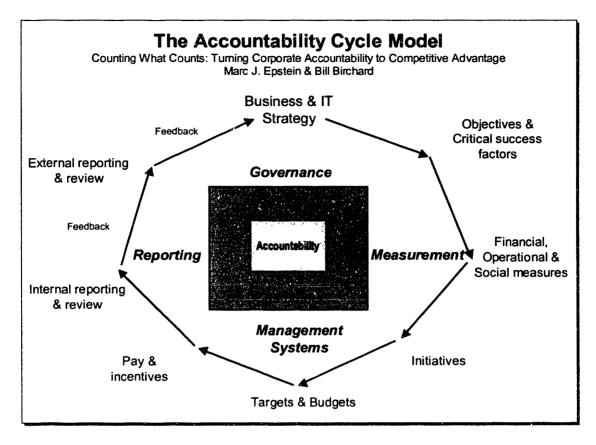
The more both parties can reach mutual understanding on goals, metrics and mechanisms, the less often barriers will arise. Of course, challenges to such harmonious relationships are certain. When requirements change, the customer seeks cooperation from the provider to address these changes. With a healthy win-win relationship, a provider will be motivated to help address the needs for mutual continued success. Less than helpful are rigid enforcement of either the SOW (by the service provider) or the SLA (by the customer). Some changes or alterations will require additional fees or impact other elements of service contracted. These changes should be fairly measured, analyzed and shared in open communication to assure that the provider is able to earn a reasonable profit while offering a reasonable service price.

Advance understanding that many such changes are likely over the term of the contract will lead to less confrontational adjustments and assure continued benefits for both parties. Employ the expertise of the provider in determining alternatives to addressing new needs. A provider who feels assured that changes include appropriate financial adjustments will strive to innovate. Dr. Boyd finds innovation is best nurtured when inspired and rewarded and should be a touchstone of the provider's corporate culture. Boyd also finds institutionalization of trust and confidence, responsiveness, and innovation must permeate every aspect of a service provider's operations. Some of the key areas where these principles are realized include leadership, corporate culture, and technology.

# IV-4-2. The Accountability Cycle

After a company engages in an outsourcing agreement, good execution management is necessary to maintain the positive environment created in the planning and negotiation stages of the partnership. Thus, managers in both parties must proactively monitor the on-going service issues to ensure they are fulfilling the terms of the agreement in a continuing basis. Epstein and Birchard call this the accountability cycle.

Figure 27: The Accountability Cycle



Central to the accountability cycle is the recognition that those governing are not the sole receivers of service. Whether IT customer or IT provider, the firm is responsible to shareholders for maximizing the return on their investment in the company. The firm is responsible to its employees to provide a safe and effective work environment and o equip its personnel with the tools and capabilities needed to perform their duties. The firm is responsible to the community for being good stewards of the environment, providing the benefits of employment to its citizens, enabling supporting businesses to thrive, and thereby providing the tax revenues needed to support community schools and other municipal services. The firm is responsible to its customers, on whom it relies upon to receive revenue, to provide a quality product or service that consistently provides value. The firm is responsible for delivering on its advertised promises in such a manner that its consumers seek to maintain interest in the firm and promotes their product or service to neighbors and friends.

During the sequential strategic planning process for the corporation, business and IT function, management committed to objectives that promoted the fulfillment of its strategic goals. In order to monitor the effectiveness of, and progress toward fulfillment of those goals, measures, management systems and reporting are needed. Quantitative and qualitative measures provide an objective means of assessing the effectiveness of the strategies established in pursuit of objectives; many books have been written on the characteristics of good measurements – we will not attempt to prescribe those here. But in short, both the IT outsourcing provider and customer should establish objective, representative measures that encourage appropriate and reinforcing behaviors in pursuit of the IT outsourcing SLA and business goals. Timely and objective measures are not influenced in reporting by intermediaries, but are most reliable when collected in a consistent and objective fashion free from subjective adjustment. Information systems provide this service very effectively once management is able to define an objective and pertinent algorithm for data collection and reporting.

Consistent reporting of this data enables management, in its governance role, to monitor the full spectrum of functions and responsibilities within the firm, spanning financial, operational and environmental issues. With this information successes and failures can be identified and replicated or corrected through targeted activities, or initiatives. Initiatives address specific interests and needs and pursue corrective actions, spread of best practices and strategic opportunities. Initiatives must be funded however, with targets and budgets, which serve to provide other means of assessing success or failure in execution. Pay and incentives are usually employed to reinforce employees' best efforts in succeeding in company-approved initiatives that help fulfill its goals and objectives.

The outsourcing provider uses reporting within work centers to pride granular feedback at that level of management. At higher levels of management, less granular and more aggregate measures are appropriate for use. This reporting loop provides management at all levels the information they need to manage performance within their area of responsibility. With this performance feedback, a firm is equipped to make adjustments as needed in pursuit of excellent service at IT outsourcing provide and business partner. The higher level of information also serves as effective feedback to the customer receiving the IT services.

### IV-4-4. SLA Management Tools

Tere' Bracco, an analyst in research firm, Current Analysis Enterprise Infrastructure Group, recommends that enterprises require service providers to offer them comprehensive tools for monitoring and managing their SLAs.<sup>26</sup> The best SLA tools let enterprise IT managers look at network performance the same way the service provider does. Some SLA management tools are typically deployed by the service provider but used by the enterprise via a web interface, allowing IT personnel to monitor network performance and manage their network SLAs on the fly, just like the service provider itself. Bracco suggest SLA tools should also monitor and manage an SLA's metrics in real time, rather than providing mere historical views of past performance.

Consulting firm Jupiter Media matrix suggests that effective agreements levy penalties against service providers who violate the terms of their contracts. Generally, these come as credits against future service. In addition to refunds for lost time or poor performance, penalties for SLA violations should also consider the impact of a violation on an enterprise's business. It is, for instance, unreasonable for a service provider to offer a refund just for a specified amount of time lost when an enterprise suffers financial loss because of an SLA violation.

# IV-4-5. Case study: Continental Bank

To demonstrate one of the best practices for continuous monitoring and improvement in the execution stage, we would like to present the Continental Bank's case showing how they managed the relationship with its outsourcing provider, Integrated Systems Solutions Corporation (ISSC): IBM's outsourcing subsidiary.

Even after outsourcing project started, Continental Bank wanted to maintain the governance of its basic technology strategy. The bank set the strategic direction and established project priorities, content, and budget. ISSC and Ernst & Young, another partner, clearly understood their service range and extent of responsibility in the whole project. ISSC was

responsible for technological resources and E&Y was responsible for developing and providing the tools Continental Bank's employees needed. Continental Bank set up technical oversight group (TOG) that consisted of representatives from the bank's business units in order to balance the technological requirements of individual units with the bank's overall IT strategy. TOG was responsible for deciding which projects should have higher priority and which shouldn't.

Backed up by the management, the bank also created an independent 20-person taskforce formed by technically literate bankers. Having both banking business and technology knowledge, they worked as liaison between the bank and ISSC to ensure communication between the two parties was open and effective. The team had weekly meetings with ISSC to review the project, resolve problems, and provide useful feedback to business units. From this case, we understand that the bank's continuous effort to maintain the project governance and ensure the mechanism for the improvement cycle is one of the keys to the success of the unprecedented outsourcing project.

### IV-4-6. Execution Conclusion

The execution process and governance feedback loop are enabled by technology to provide accurate and timely representation of the health of the provided service. With a system like this in place, the IT service provider and customer can reinforce effective communication with information. This information will enable both leaders to fully and qualitatively engage in the desired partnering toward fulfillment of business goals. It also serves to further bond relationships in the outsourcing arrangement when outsourcing partners are successful in applying their shared vision for IT in the business toward the recognition of patterns of activity that suggest business connections and interdependencies. As technology evolves, formerly appropriate measures may need adjustment, new services may be warranted that enable added value to the business and provider. Such business systems thinking, coupled with a focus on action and problem solving, make for a dynamic outsourcing partnership.

<sup>&</sup>lt;sup>26</sup> Jim Carr. (2001). Network Magazine

# Chapter V. Conclusion

In this chapter, we will draw conclusions based upon the literature review, industry surveys and our own survey, on strategizing, deciding and managing IT sourcing employing our process frameworks. These frameworks provide a best practice model for outsourcing customers, and provide insight for IT service providers into how best to attract and keep outsourcing customers.

### V-1. Looking for Business Solutions

In today's technology-driven business environment, information systems are indispensable to almost any function in any company to support day-to-day operations and activities. Enterprise users are coming to consider IT investment a strategic business decision rather than a functional decision. Because of the nature of information systems - complex, costly, and volatile - capital and human resources may be inefficiently targeted toward IT efforts, consuming management time and focus. Further, technology and required skill sets can become easily outdated as information technology evolves at very fast speeds. In order to cope with increasing IT investment costs, enterprise users are seeking means to maximize the strategic effectiveness of information systems through the use of external IT resources. Computer hardware and software themselves do not generate cash flow nor have strategic value. Owning hardware and software as assets on the balance sheet does not contribute to shareholder value. In recognition of this, companies are becoming increasingly more willing to turn to professional third party service providers. Creating a strategic partnership with a reliable IT service provider brings companies two clear merits (1) freedom to focus on their core competence (2) utilization of the economics of scale and scope which external IT providers can provide.

The key to successful IT outsourcing lies in partnership and strategic orientation between company and provider. Which manufacturer's equipment is selected is no longer a critical issue to a company, just as purchasers no longer note which manufacturer's hard disk is used when they buy a workstation. As hardware becomes a commodity, users see more value in

customized solutions that fills the gap between their business goals and available IT resources.

## V-2. IT Outsourcing Life Cycle

Based on our research findings, we've developed an integrated framework of processes derived from the best practices in strategic IT outsourcing which can maximize a corporate user's opportunity for a successful outsourcing effort. The information technology function has been recognized as one of the most difficult areas to outsource because of its increasing complexity of system dynamics; in fact, IT outsourcing is often mismanaged and users are frequently disappointed by the under-performing results after spending substantial sums of money.

We offer four fundamental processes essential to successful strategic IT outsourcing. Each process is briefly summarized below:

Business Strategy: Strategy is the cornerstone of all corporate action. To deliver value, a firm's IT strategy must be tightly aligned with its business strategy. As an outcome of corporate, business and IT strategy development, a firm will have a specific set of multiyear broad action plans and specific action programs to be resourced. Corporate resourcing decisions follow the definition of these action plans and programs. Defined corporate, business and functional (IT) strategies provide the basis for core competency determination and subsequently for a decision as to in-source or outsource IT services.

**Process Engineering:** The process of defining a firm's processes serves many masters: the disciplined process is critical to effective negotiation with outsourcing providers; it involves business process owners in thorough analysis of the activities a firm expends resources upon; it may produce the first written guidance of operational procedure for the activity and serve to educate current and future employees; it offers firms the choice in level of effort ranging from "as-is" assumption to radical reengineering; it produces efficiencies through adaptation of standardized processes; it provides the quantification of quality, efficiency and frequency required to allow the development of outsourcing documents to include the request for

information (RFI), request for proposal (RFP), statement of work (SOW), and ultimately the service level agreement (SLA).

Provider Selection: Enterprise users sifting through potential outsourcers must remember that switching cost is very high, the lock-in effect is very strong, and that contracts don't guarantee satisfactory results. Therefore, selecting the right provider is a critical factor in any outsourcing effort. Because motivation and partnership matter most in a long-term relationship, qualitative factors such as communication skills, management style, strategic orientation, and cultural fit have the same degree of importance to outsourcing success as do technical expertise and experience. The provider selection process is time consuming and painstaking, yet such efforts are necessary to minimize the risks and maximize the returns of outsourcing.

Execution: The execution process and governance feedback loop are enabled by technology to provide accurate and timely representation of the health of the provided service. With adequate controls in place, the IT service provider and customer can reinforce effective communication with information. This information will enable both leaders to fully and qualitatively engage in the desired partnering toward fulfillment of business goals. It also serves to further bond relationships in the outsourcing arrangement when outsourcing partners are successful in applying their shared vision for IT in the business toward the recognition of patterns of activity that suggest business connections and interdependencies. As technology evolves, formerly appropriate measures may need adjustment, new services may be warranted that enable added value to the business and provider. Such business systems thinking, coupled with a focus on action and problem solving, make for a dynamic outsourcing partnership.

We found the following common rules for IT outsourcing: (1) companies who succeed in IT outsourcing understand that the skill set required for IT outsourcing is essentially different from that for other kinds of business outsourcing. (2) it is important that companies consider providers a long-term business partner who can share business strategy and culture. (3) successful corporate users recognize that outsourcing IT management doesn't mean that they

can completely hand-off IT related issues. Companies must ensure adequate governance of the outsourced activity.

In the table below (figure 25), we have summarized how the aforesaid four fundamental processes relate to: the value of each process to the customer firm; the services or activities customers must accomplish, regardless of source; the degree of customer-provider lock-in; and The Company's competence in each stage (process) based on the corporate users' perception.

Figure 28: Strategic IT Outsourcing Life Cycle

# Strategic IT Outsourcing Life Cycle

Process	Value Proposition	Services	System Lock-in	The Company Presence
Business & IT Strategy	Focus on core business Utilize external resources Obtain scalability Improve financial ratio	Review existing IT sourcing management policy in accordance with corporate strategy and core competence		Weak
Process Engineering	Enhance productivity Increase quality of service Reduce cost	Optimize business operation Standardize workflow Drastic reengineering		
Provider Selection	Partnership to fill the gap between corporate strategy and available resources	Understand client's business issue Share corporate culture Create long-term partnership		
Execution	Maximize strategic effectiveness of outsourcing Maintain governance and flexibility	Managing the infrastructure Interactive communication Continuous improvement	Weak	Strong

Recall customers' expressed desire service provider's who are solution oriented, business partners. Ideally, customers want help in determining how best to leverage information technology toward achievement of business goals, and they want that same partner to execute

the IT strategy formed. The provider that serves at this level of the value chain maintains the ear of senior business leaders and is first in line to propose new business opportunities and deliver those services lower in the value chain as a result. The provider that can provide the entire spectrum of value chain services, whether through partnerships of otherwise, is in the most powerful position with the outsourcing-determined customer.

We conclude that providers staying in the lower links of the value chain will be increasingly disintermediated by other providers that provide business strategy and process level services. In addition, the lower positions in the value chain offer lower profit margins, as these services become seen as mere commodities over time. While each of our outsourcing processes has critical value to successful outsourcing, corporate users perceive The Company has competence only in lower end of the value chain. This presents a significant limitation for The Company by enabling disintermediation by providers servicing the higher end of the value chain, and potentially distancing The Company from business opportunities across the entire value chain.

### V-3. Moving Up the Value Chain

As we look at the IT investment decision-making process in organizations, decisions are virtually always made from the top of the customer organization for strategic decisions and from lower levels for technical decisions. IT infrastructure never drives business strategy; it can only limit it. Therefore, the earlier in the decision-making stage (i.e. the higher in decision-making hierarchy) the provider is involved, the more influence the provider can have in customer decisions, including system architecture and hardware provider selection. A corporate user's challenge is to structure an outsourcing partnership that effectively supports business strategy. If we overlay a hierarchical value chain of IT services with Hax & Wilde's Delta Model<sup>27</sup> (figure 27), differentiating best product, total customer solutions and systems lock-in, we are able to highlight the holistic synergy enabled for both customer and provider in an outsourcing partnership. The customer attains the business strategy-oriented partnership that enables strategic leveraging of IT capability toward the attainment

<sup>&</sup>lt;sup>27</sup> Hax, Arnoldo and Wilde, Dean (2001). The Delta Project. New Jersey: Prentice Hall.

of firm goals. The customer takes comfort in knowing the consultant understands what needs to be done, and will oversee delivery of desired business results, to include business processes, applications to facilitate those processes and an infrastructure to support the system.

IT Service Value Chain System Lock-In Strategy Customer Outsourcer Governance Partnership. Knowledge Influence Influence Business Processes Applications infrastructure **Total Customer Best Product** Solutions

Figure 29: Value Chain Pyramid

The outsourcing provider enjoys the benefits of the high margin business strategy services, and is first in line to execute with its own resources or through partnership with other capable firms. At this level in the value chain, system lock-in is obtained with high exit costs for the customer. Margins increase as one moves up the value chain. Strategy consulting is a highly customized service with very high margins of 25% or more, whereas IT infrastructure businesses maintain comparatively low margins of approximately 12% because these services can be replicated with other providers with price as key differentiator. If a provider remains competitive only at the infrastructure layer in the IT value chain where products are commodized, disintermediation is likely.

<sup>&</sup>lt;sup>28</sup> Dun & Bradstreet. (2001)

Outsourcing begins a long-term relationship. Our research found the majority of enterprises renewed outsourcing contracts with the same provider despite a level of dissatisfaction with the service provided<sup>29</sup>. This demonstrates the customer's high switching costs; experienced-based value, such as understanding the client's business strategy and culture, are not easily replaced or replicated.

#### V-4. The Human Role

Finally, we want to emphasize that outsourcing is a continuous cycle and collaborative process of improvement, action, and feedback between customer and provider. There is no short cut or cookie-cutter method for successful results. People skills are the most demanded skills for successful outsourcing because human beings ultimately manage all technology. Trusting relationships must be built and maintained on both sides of the partnership; no proprietary project management methodologies, exciting technology or management support can substitute for a strong relationship between motivated managers equally determined to make an outsourcing partnership succeed to the benefit of both.

<sup>&</sup>lt;sup>29</sup> Howard M. Lackow. (2001). The Conference Board, IT Outsourcing Trends

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# **Appendix**



Name: Email:

### Sloan School of Management Massachusetts Institute of Technology

## Information Technology Survey

Thank you for participating in this information technology survey – your responses are very important to us. This survey will take **less than 15 minutes** of your time. Your input will be used by our research team at the MIT Sloan School of Management to develop assessments of today's IT requirements in different industries. Your answers to the survey are <u>confidential</u> and results will be used only in aggregate with those of other survey respondents. Upon completion of the study, these results will be shared with you.

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nancial management /IT Management ps/Admin/HR
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#### ☐ Primarily Internally ☐ Primarily Outsourcing 1. If your organization outsources, which of the following three describes its situation best: Comprehensive Outsourcing = Outsourcer has complete operational responsibility across the infrastructure. Infrastructure Management Services = Outsourcer manages the organization's IT infrastructure (tailored options for storage, networking, applications, help desk) Complementary Management Services = Outsourcer complements the organization's IT capability and focus 2. How does your organization fulfill the following IT needs? **Application Hosting** a) ☐ Primarily Internally ☐ Primarily Outsourcing b) Application/System Monitoring ☐ Primarily Internally ☐ Primarily Outsourcing Data Center Operations/Facilities c) ☐ Primarily Internally ☐ Primarily Outsourcing d) Data/Voice Network Management ☐ Primarily Internally ☐ Primarily Outsourcing Develop IT Strategy e) ☐ Primarily Internally ☐ Primarily Outsourcing f) Implement IT Strategy ☐ Primarily Internally ☐ Primarily Outsourcing Software Development & Maintenance ☐ Primarily Internally g) ☐ Primarily Outsourcing Security h) ☐ Primarily Internally ☐ Primarily Outsourcing i) Storage Management ☐ Primarily Internally ☐ Primarily Outsourcing Support services (end user and other) j) ☐ Primarily Internally ☐ Primarily Outsourcing For each of the above categories, please indicate the most important criterion that influenced the choices made. 3. a) **Application Hosting** ☐ Expertise ☐ Efficiency ☐ Control ☐ Resources ☐ Cost Application/System Monitoring b) ☐ Expertise ☐ Efficiency ☐ Control ☐ Resources □ Cost Data Center Operations/Facilities c) ☐ Expertise ☐ Efficiency ☐ Control ☐ Resources □ Cost Data/Voice Network Management d) ☐ Expertise ☐ Efficiency ☐ Control ☐ Resources ☐ Cost Develop IT Strategy e) ☐ Expertise ☐ Efficiency ☐ Control ☐ Resources ☐ Cost Implement IT Strategy f) ☐ Expertise ☐ Efficiency ☐ Control ☐ Resources □ Cost g) Security ☐ Expertise ☐ Efficiency ☐ Control ☐ Resources ☐ Cost Software Development & Maintenance □ Expertise ☐ Efficiency ☐ Control □ **Kesources** □ Cost i) Storage Management ☐ Expertise ☐ Efficiency ☐ Control ☐ Resources □ Cost

How does your organization address its information technology (IT) needs?

j)

Support services (end user and other)

☐ Efficiency

☐ Control

☐ Resources

□ Cost

☐ Expertise

4.	Have there been any changes in any	of these IT area	as in any of the	e categorie	s in the last year?		
a)	Application Hosting	□ No	change	□ More	outsourcing	☐ More insourcing	
b)	Application/System Monitoring	□ No	change	□ More	outsourcing	☐ More insourcing	
c)	Data Center Operations/Facilities	□ No	change	□ More	outsourcing	☐ More insourcing	
d)	Data/Voice Network Management	□ No	change	☐ More	outsourcing	☐ More insourcing	
e)	Developing IT Strategies	□No	change	☐ More	outsourcing	☐ More insourcing	
f)	Implementing IT Strategies	□ No	change	☐ More o	outsourcing	☐ More insourcing	
g)	Security	□ No	change	☐ More o	outsourcing	☐ More insourcing	
h)	Software Development & Maintenance		change	☐ More o	outsourcing	☐ More insourcing	
i)	Storage Management	□No	change	☐ More o	outsourcing	☐ More insourcing	
j)	Support'services (end user and other)	□No	-		outsourcing	☐ More insourcing	
						•	
<i>5</i> .	Do you anticipate a significant transi	tion in any of tl	hese areas ove	r the next	year?		
a)	Application Hosting	□ No change	☐ More out	sourcing	☐ More insourcing	g 🗆 Undecided	
b)	Application/System Monitoring	☐ No change	□ More out	sourcing	☐ More insourcing	g 🗆 Undecided	
c)	Data Center Operations/Facilities	○ No change	☐ More out	sourcing	☐ More insourcing	g Undecided	
d)	Data/Voice Network Management	No change	☐ More out	sourcing	☐ More insourcing	g 💢 Undecided	
e)	Developing IT Strategies	$\square$ No change	☐ More out	sourcing	☐ More insourcing	g Undecided	
f)	Implementing IT Strategies	□ No change	☐ More out	sourcing	More insourcing	g Undecided	
g)	Security	□ No change	☐ More out	sourcing		g Undecided	
h)	Software Development & Maintenance	□ No change	☐ More outs	sourcing	☐ More insourcing	g □ Undecided	
ι)	Storage Management	No change	. More outs	sourcing	☐ More insourcing	g 3 Undecided	
j)	Support services (end user and other)	No change	○ More outs	sourcing	. More insourcing	g Undecided	
6.	If any of the above categories has bee	n outsourced, p	lease identify	the firm to	which these tasks	have been outsourced	
a)	Application Hosting						
b)	Application/System Monitoring	27 to 4 and another the same as a way			an American		
c)	Data Center Operations/Facilities	10 Marine and 2 on 1980 2 max					
d)	Data/Voice Network Management	and the second to the violation of the second to the secon					
e)	Develop IT Strategy	TO STATE OF THE PERSON OF THE			and the same of th		
t)	Implement IT Strategy						
g)	Security						
h)	Software Development & Maintenance	- AM MM V					
1)	Storage Management						
J)	Support services (end user and other)						

7.	Please, identify if The Company* was	considered for any of these opportunities. If no, please answer as to why not.			
a)	Application Hosting	□ Yes.			
		<ul> <li>□ No. (Please specify reason)</li> <li>□ Unaware of The Company's abilities in this area</li> <li>□ The Company is not on the list of pre-qualified preferred providers</li> <li>□ Priority given to existing hardware provider</li> <li>□ Other, please describe</li> </ul>			
b)	Application/System Monitoring	□ Yes			
		<ul> <li>□ No. (Please specify reason)</li> <li>□ Unaware of The Company's abilities in this area</li> <li>□ The Company is not on the list of pre-qualified preferred providers</li> <li>□ Priority given to existing hardware provider</li> <li>□ Other, please describe</li> </ul>			
c)	Data Center Operations/Facilities	☐ Yes			
		<ul> <li>□ No. (Please specify reason)</li> <li>□ Unaware of The Company's abilities in this area</li> <li>□ The Company is not on the list of pre-qualified preferred providers</li> <li>□ Priority given to existing hardware provider</li> <li>□ Other, please describe</li> </ul>			
d)	Data/Voice Network Management	□ Yes			
		☐ No. (Please specify reason)  ☐ Unaware of The Company's abilities in this area  ☐ The Company is not on the list of pre-qualified preferred providers  ☐ Priority given to existing hardware provider  ☐ Other, please describe			
e)	Develop IT Strategy	. Yes			
		No. (Please specify reason)  Unaware of The Company's abilities in this area  The Company is not on the list of pre-qualified preferred providers  Priority given to existing hardware provider  Other, please describe			
f)	Implement IT Strategy	Yes			
		No. (Please specify reason)  Unaware of The Company's abilities in this area  The Company is not on the list of pre-qualified preferred providers  Priority given to existing hardware provider  Other, please describe			
g)	Security	Yes			
		No. (Please specify reason) Unaware of The Company's abilities in this area The Company is not on the list of pre-qualified preferred providers Priority given to existing hardware provider Other, please describe			
	*Pseudonym used to refer to a Fo	rtune 500 company			

h)	Software Development & Maintenance	□ Yes			
		☐ No. (Please specify reason) ☐ Unaware of The Company's ab ☐ The Company is not on the list ☐ Priority given to existing hardy ☐ Other, please describe	npany's abilities in this area on the list of pre-qualified preferred providers sting hardware provider		
i)	Storage Management	□ Yes			
		<ul> <li>□ No. (Please specify reason)</li> <li>□ Unaware of The Company's abilities in this area</li> <li>□ The Company is not on the list of pre-qualified preferred providers</li> <li>□ Priority given to existing hardware provider</li> <li>□ Other, please describe</li> </ul>			
j)	Support services (end user and other)	□Yes			
		☐ No. (Please specify reason) ☐ Unaware of The Company's ab ☐ The Company is not on the list ☐ Priority given to existing hardy ☐ Other, please describe	of pre-qualified preferred providers		
	Who is the deciding authority as to whet resident/Owner/Partner		CFO/Treasurer/Controller		
	r/Manager/Chief/Head of IS/IT or Comm/1		COO/Exec VP/Senior VP		
	please describe:				
	Please, rank the top three (1st, 2nd & 3rd)	criteria your organization has used to	select IT service provider.		
	nance/Service Levels Guarantees		Price		
	Specialization		Proven Track Record		
Recipro	ocity		Third-party Recommendation		
Other, p	please describe:				
	Please, rank the top three ( $1^{st}$ , $2^{nd}$ & $3^{rd}$ ) on core business	benefits received while outsourcing.	Improved internal service		
Improv	ed external service		Increased access to expertise		
-	zed resources		Reduced costs		
Other, p	blease describe:				

<sup>\*</sup>Pseudonym used to refer to a Fortune 500 company

11. Tieuse, runk ine io	o iniee (1 , 2 & 3 ) proviems enco	untereu white outsourcing.
Increased costs		Lack of contract governance by company
Lack of vendor flexibility		Loss of control
Staff turnover		Unclear contract
Other, please describe:		
12. How does your org	anization measure or evaluate the ej	ffectiveness of outsourcing?
Quantitatively (e.g. ROI, exp	penses reduced)	Don't measure
Qualitatively (e.g. increased	customer satisfaction)	Both
Other, please describe:		

Thank you very much for your cooperation!

# THESIS PROCESSING SLIP

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