THE BLACKWELL ENCYCLOPEDIA OF MANAGEMENT

SECOND EDITION

MANAGEMENT INFORMATION SYSTEMS

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IT outsourcing

Soon Ang and Christine Koh

IT outsourcing refers to the contracting out of some or all of an organization's IT functions, systems, or services to an external service provider. Though IT outsourcing has been around since the 1960s, interest grew in the early 1990s, when Eastman Kodak's landmark outsourcing decision triggered many firms to embrace the concept of total IT outsourcing. Total outsourcing refers to relinquishing the entire IT function to external service providers and legally transferring IT assets and human resources to the provider in the process. Total outsourcing is often motivated by cost reasons; senior executives who view IT as a non-core activity and a cost burden to be minimized often choose to outsource the entire IT function to external service providers, who can provide these services more efficiently owing to economies of scale and scope (Ang and Straub, 1998).

Increasingly, however, selective IT outsourcing has become the more dominant mode adopted, whereby firms outsource only selected IT activities while retaining ownership and control over other IT activities. Activities that are particularly suited for outsourcing are those for which the firm has neither a critical strategic need (e.g., IT infrastructure, such as data center operations, network management, and PC acquisitions and maintenance) nor special capabilities (e.g., knowledge in net-based applications development). IT outsourcing is thus viewed as a strategic decision that provides firms access to needed resources and capabilities to fill gaps in their current capabilities and supplement inhouse competences. Outsourcing enables firms to leverage on provider capabilities to improve critical aspects of the business performance and deliver business impact through joint efforts that develop complementary skills and capabilities.

MANAGING THE OUTSOURCING EFFORTS: LEGAL AND PSYCHOLOGICAL CONTRACTING

Proper management of the outsourcing effort is critical to success. Although much emphasis has been placed on the legal contract, it is equally important to manage the psychological contract to insure a close working relationship between the parties involved Since the outsourcing client and provider do not share the same profit motive, there will always be a potential built-in conflict between the two parties. A proper legal contract stating obligations and responsibilities of both parties is therefore essential to prevent opportunistic behavior of either party. Outsourcing firms must develop detailed performance standards and incorporate them into the legal contract. This must be coupled with careful measurement of the provider performance, and continual monitoring throughout the entire contract period to insure that all contractual terms are complied with.

Even though the legal contract provides the basis for effective monitoring and control, reliance on a legal contract alone is insufficient as a legal contract can never specify completely all contingencies that can arise. Rather, it must be balanced with efforts to build a strong relationship with the provider – a relationship characterized by trust, commitment, communication, cooperation, flexibility, and joint conflict resolution. Studies have shown that successful outsourcing arrangements are those with both tight contractual controls and a partnership-type relationship characterized by trust.

Essentially, what is important is the psychological contract between the two parties (Ang and Koh, 2000; Ho, Ang, and Straub, 2003). A psychological contract refers to people's mental beliefs and expectations about their mutual obligations in a contractual relation. It reflects the way the parties interpreted and understood their mutual obligations in the contract. IT outsourcing clients and providers hold certain beliefs of their mutual obligations in the outsourcing relationship. The concept of psychological contract highlights the mutual obligations between both the parties involved, emphasizing the importance of managing the dyadic relationship between the outsourcing clients and providers. In addition, it also highlights the fact that not all promises are incorporated into the legal contract, and the importance of going beyond the legal obligations to understand the psychological contract obligations. Since ambiguous promises are more likely to lead to misunderstanding and contract breach, outsourcing firms should work toward clarity of promises, making the obligaAccording to Ang and Beath (1993) and Ang and Toh (1998), successful IT outsourcing requires parties to consider five critical contracting elements:

- 1 *Authority structures* where rights and responsibilities are assigned to either the client or provider to make discretionary decisions, issue orders, or demand performance. Examples of these decisions include identifying and changing key personnel; making price adjustments; and changing the scope of the contract as price-performance ratios of IT drop.
- 2 Rule-based incentive systems where rewards and punishments are tied to provider performance, and not to the market. Market incentives work well under conditions of certainty, where all performance contingencies are considered prior to contractual agreement. Rule-based incentive systems dissociate compensation from marketdetermined forces. They reflect locally determined inducements for desirable future performance. For example, if timely delivery is vital, penalties for delays beyond an agreed completion date and bonuses for early completion may be incorporated into the contract.
- 3 Standard operating procedures where routines are followed by parties in the contract to insure that the contract progresses as planned. Examples of routines include requiring the provider to produce formal progress reports; to conduct regular faceto-face meetings with clients; and to bring to the attention of the client potential IT operational problems and project delays.
- 4 Non-market-based pricing systems where pricing algorithms are designed to accommodate cost uncertainties in long-term IT contracts. Non-market-based systems are market-price established by competitive bidding but modified by cost-recovery procedures. A combination of market pricing and cost-recovery algorithms is designed to insure a reasonable balance between price risk for the client and compensation risk for the provider.
- 5 Informal mechanisms for resolving disputes

conflicts without direct referral to court sanction. Unlike any typical arm's-length contractual arrangement, a series of private and informal appeals is embedded in the contract to insure that parties survive disputes. In the event of any disagreements, parties should agree to discuss and resolve the dispute informally and privately between top management of the client and provider organizations. In the event that such negotiation is not successful, parties should submit the dispute to mediation by a third party arbitrator – a mutually agreed-upon computer professional. Only if the arbitration fails does formal legal litigation commence.

EVIDENCE OF BENEFITS DERIVED FROM IT OUTSOURCING

Although IT outsourcing offers many potential benefits to firms, realizing these benefits is not always guaranteed. The benefits of outsourcing can be easily eroded by various hidden costs, such as provider search and contracting costs, initial and post-outsourcing transition cost, as well as the cost of managing the outsourcing effort (Ang and Straub, 1998). IT outsourcing is also laden with risks, including dependence on the provider, loss of critical business and technical skills, and loss of innovative capacity.

Overall, outsourcing success rates appear to have have improved over the years – from only 48 percent of outsourcing firms reporting that they had achieved expected results in the mid-1990s to 73 percent in 2000 (Lacity, 2002). Nonetheless, objective evidence of impact of IT outsourcing on actual firm performance remains relatively scarce. Although IT outsourcing is associated with positive stock market reactions (e.g., Hayes, Hunton, and Reck, 2000; Farag and Krishnan, 2003), Gilley and Rasheed (2000) found that outsourcing in general had no significant direct effect on overall firm performance.

IT OUTSOURCING TRENDS

The outlook for the IT outsourcing market remains robust. The worldwide outsourcing market is estimated to reach US\$282 billion in 2006 (Gartner Group, November 2003). The US and UK remain the largest and most estabZealand, Australia, and Asia are also growing rapidly.

The outsourcing landscape has changed over the years. The range and depth of services outsourced have increased, and outsourcing contracts are growing in size and scope, often involving multiple providers. This is propelled partially by the maturing marketplace, and partially by the increasing trend toward mergers, acquisitions, strategic alliances, and joint ventures among major service providers. This trend has enabled providers to consolidate their strength and position within the industry, and to provide larger, multidimensional outsourcing arrangements involving multiple providers (Currie, 2000).

Newer forms of outsourcing are also evolving.-While early outsourcing initiatives focused on IT management and development, business process outsourcing (BPO) is now becoming the fastestgrowing segment, accounting for 42 percent of the total IT outsourcing market (Gartner Group, November 2003). BPO involves the outsourcing of the entire delivery of selected business processes to an external service provider. The most common processes outsourced are transactionintensive processes such as payroll, credit card processing, and claims processing; outsourcing of process outsourcing is sometimes extended to enterprise processes such as human resources, finance, accounting, and procurement.

Outsourcing is also increasingly becoming global. Propelled by improvements in technology and the sophistication of offshore IT providers, companies are moving their outsourcing offshore, to countries such as India, China, and Russia. Spending on offshore software development and services reached US\$10 billion in 2003, and is estimated to reach US\$31 billion by 2008 (Global Insight, reported in PC Magazine, May 18, 2004). Offshore outsourcing is often motivated by cost differentials, as well as the availability of high skills in the face of a global IT skill shortage. The cost differentials are particularly significant when firms outsource to developing Asian countries; sending development work offshore to India, for example, can reduce costs by some 50 percent (Heeks et al.,

2001). However, managing offshore outsourcing projects involves greater challenges, because of the need to control the project remotely and to interact cross-culturally. This makes it more difficult for firms to maintain control over the outsourced activities and to monitor the provider, as well as to coordinate activities among the parties involved. This can be further exacerbated by differences in political and cultural environments.

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