Center for Information Systems Research

Sloan School of Management
Massachusetts Institute of Technology

RESEARCH BRIEFING



Volume III Number 3B October 2003

PLANNING A STRATEGIC OUTSOURCING PROFILE¹

Jeanne Ross, Principal Research Scientist Nils Olaya Fonstad, Postdoctoral Associate MIT Center for Information Systems Research

As firms outsource IT activities they create an outsourcing profile—the set of outsourcing arrangements in which a firm engages. A firm's IT outsourcing profile is influenced by the business strategies that define outsourcing objectives, the firm's IT and organizational competencies, and the capabilities available from vendors. In a prior briefing we noted that different outsourcing arrangements demand different organizational competencies.² In this briefing we review IT outsourcing options in light of firms' IT objectives and vendors' value propositions.

Firms have four choices of what to outsource: (1) infrastructure and computer operations encompassing all shared services and local infrastructures; (2) applications development delivering new capabilities; (3) application maintenance and enhancement; and (4) IT-enabled business processes. Firms may choose to partly or wholly outsource one. some or all of these activities. Firms then have two choices of how to outsource each activity: (1) largescale strategic partnerships in which a firm contracts for broadly defined services from a single vendor; and (2) selective, best of breed outsourcing in which a firm contracts for a service component that may or may not—be customized to its specific needs. Each outsourcing arrangement responds to different organizational objectives and demands different competencies. Figure 1 summarizes firms' IT outsourcing options in a 4x2 matrix.

The matrix in Figure 1 can be filled in to show the thrust of a firm's existing outsourcing arrangements or to help firms identify primary and secondary targets for their outsourcing efforts. Although a firm's outsourcing profile may include examples of outsourcing arrangements in each of the cells in the matrix, its key IT outsourcing objectives can often be addressed within a single cell or small set of cells. Large-scale partnerships require a great deal of management attention and initially are highly disruptive. Selective outsourcing requires the ability to integrate individual service components. Firms we have studied benefit from limiting their outsourcing to arrangements that have a strong value proposition. A clearly defined outsourcing strategy (i.e., what and how a firm chooses to outsource) requires alignment between a firm's IT objectives, its IT and organizational capabilities and what a vendor has to offer. Examples of three firms' dominant outsourcing arrangements are instructive.

Examples of Outsourcing Arrangements

Outsourcing for Business Transformation

BuildCo, a manufacturing firm, has focused its outsourcing efforts on developing a single strategic partnership, consuming nearly half the firm's IT expense budget and encompassing most infrastructure services and data center operations as well as some application development and maintenance. BuildCo instituted outsourcing to help transform from a set of independent operating units to a global firm with a portfolio of powerful consumer brands. Management viewed the role of IT in its transformation as providing shared technology platforms and data to facilitate both common enterprise-wide business processes and unique business applications. The objectives of the outsourcing arrangements were: (1) to ensure professional development of IT staff and, accordingly, access to industry best practice; (2) to provide variable, secure, and reliable computing capacity; and (3) to permit increased management focus on the distinctive capabilities of the firmmanufacturing and R&D-rather than on computer center operations and other IT activities. BuildCo's outsourcing vendor has helped the firm design and implement a more standardized technology

¹ This research was made possible by the support of CISR sponsors, and in particular CISR Patrons IBM and Microsoft.

² See Ross, J. and Westerman, G., *Evolving Competencies for IT Outsourcing*, CISR Research Briefing Vol. III, No. 2C, July 2003.

environment. With the vendor's active involvement BuildCo has implemented a portal and middleware to enhance access to data and enable enterprise-wide solutions. As a strategic partner, the vendor manages most operational IT responsibilities. For example, most IT vendors who solicit IT managers at BuildCo are directed to the outsourcing vendor to make their case. This arrangement preserves management focus for more strategic concerns. BuildCo is developing IT staff who can identify strategic IT solutions and work with the vendor and key business partners to implement those solutions.

Outsourcing for Improved Time to Market

FinCo, a financial services firm, provides an example of an alternative approach to large-scale outsourcing. This firm considers IT operations to be a competitive strength. FinCo has a highly standardized IT environment, which it manages for low-cost and high reliability. Outsourcing vendors have confirmed that the firm would not achieve cost savings by outsourcing its computer center operations. FinCo is transforming to an electronic business. Strategically, senior management has positioned the firm to provide extraordinary personal service through on-line and call center personnel. Thus, FinCo requires timely implementation of state-of-the-art systems. The firm can leverage packaged software but it has constant demands for developing new systems or enhancements to packages. FinCo views outsourcing as a way to supplement its several hundred developers with a capable but variable work force. Accordingly, FinCo has engaged in a strategic partnership with a vendor providing approximately 25% of its application maintenance and new application development staff.

Although FinCo had traditionally boasted strong project management methodology, the outsourcing vendor brought even more rigorous project methodology to the firm's IT management practices. Meanwhile, FinCo's own governance processes apply project evaluation and program management practices to ensure that IT investments target enterprise priorities and that projects sharing new infrastructure requirements are sequenced to experiment with and then implement emerging standards. These arrangements have enabled FinCo to successfully complete ambitious customer service-oriented development projects and improve time to market. The variable work force allows FinCo to establish project priorities according to strategic objectives rather than identify projects to keep all staff gainfully employed.

Neither BuildCo nor FinCo used best of breed outsourcing as a dominant approach to outsourcing, but both did some selective outsourcing of services or projects outside their primary outsourcing focus. BuildCo preferred to limit the number of relationships it had to manage, but noted that competitive bids could keep a strategic partner "on its toes." FinCo occasionally has made selective outsourcing agreements with firms providing unique infrastructure services. Both firms insist that selective outsourcing arrangements conform to their rules (technology standards, user interface, project methodology) to protect and leverage their IT architectures.

Outsourcing for Enhanced Business Experimentation

In contrast to the first two examples, TransCo, a transportation company, has eschewed large-scale outsourcing in favor of smaller, often short-term vendor relationships. This firm, like FinCo, considers IT operations to be a competitive strength and believes it cannot achieve either cost or quality savings through outsourcing. In addition, TransCo takes pride in the professional opportunities it offers to IT developers and has not engaged in large-scale outsourcing of development and maintenance. However, TransCo's strategy calls for leading edge IT applications to provide competitive advantage through innovative customer services and lower cost operations.

TransCo has found significant benefits in working with firms specializing in state of the art technologies and technical solutions. These small-scale partnerships allow the firm to experiment with possible business solutions offered by emerging technologies. For example, TransCo arranged with several technology vendors to develop wireless applications for its workforce. The firm eventually implemented on a large scale only a subset of the experiments, but the outsourcing helped clarify what benefits the firm could generate from wireless technologies. In working with vendors this way, TransCo effectively outsources its R&D efforts through a selective set of partnerships.

Developing an Outsourcing Profile

These three firms' outsourcing arrangements reflect their different objectives for IT. They also reflect the firms' understanding how a vendor could contribute to their existing IT capabilities. BuildCo sought an efficient computing environment built to industry standards. BuildCo's vendor introduced its own highly standardized technology solutions and

provided a computing environment to enable the firm's adoption of standardized business processes. FinCo sought supplemental IT development resources to meet its heavy new application development requirements. FinCo's vendor introduced project methodology enhancements while providing a highly skilled variable work force. TransCo sought technology R&D via selective partnerships in which technology firms developed the unique capabilities of their own innovations to help stage business experiments within TransCo.

Much of the discussion of IT outsourcing success has focused on the ability of vendors to cut their clients' IT costs. The above examples underscore that cost savings is not necessarily the most significant, and certainly not the only, benefit of outsourcing. As firms recognize the IT requirements of their strategic business objectives, they can identify how outsourcers can not only provide a needed service but enhance their existing capabilities.

Planning a strategic outsourcing profile begins with understanding the key gaps between what capabilities IT already provides to a firm and what capabilities the firm most needs . Thus, firms with poorly defined enterprise architectures, inadequate shared services, or IT operations at risk of security

breaches or downtime can benefit from the expertise of vendors providing IT infrastructure and data center operations. Firms attempting to integrate large legacy systems can benefit from the expertise of vendors who provide not only maintenance support but also rigorous methodology and professional development of staff. Firms that have redundant, inconsistent business processes across business units may find value in the offerings of business process outsourcers. Business process outsourcing, like more traditional IT outsourcing, allows a firm to leverage the best practices of a specialist for those processes in which industry standard is the firm's highest aspiration. Firms can obviously choose to bolster their in-house capabilities rather than outsource, but they may find management attention more valuable elsewhere.

Once a firm understands what it wants to outsource, it can choose between a large-scale partnership or best of breed approach. The decision on how to outsource depends, in part, on how broad a set of services management chooses to outsource. Another critical determinant will be whether the firm prefers to focus on managing a vendor or on integrating individual tasks.³ In any case, firms must plan their outsourcing profiles to enhance rather than "give away" their IT capabilities.

Figure 1: Table of Outsourcing Arrangement Options

-	Large-scale Strategic Partnership	Selective, Best of Breed Outsourcing
Infrastructure & Data Center Operations	BuildCo	
New Application Development	FinCo	TransCo
Application Maintenance & Enhancement	BuildCo, FinCo	
Business Processes		

³ Ross and Westerman 2003.

MIT SLOAN CISR MISSION

MIT CISR was founded in 1974 and has a strong track record of practice-based research on the management of information technology. MIT CISR's mission is to perform practical empirical research on how firms generate business value from IT. MIT CISR disseminates this research via electronic research briefings, working papers, research workshops and executive education. Our research portfolio includes but is not limited to the following topics:

- IT Governance
- Enterprise Architecture
- IT-Related Risk Management
- IT Portfolios and IT Savvy
- Operating Model
- IT Management Oversight
- Business Models
- IT-Enabled Change
- IT Innovation
- Business Agility
- The IT Engagement Models

In July of 2008, Jeanne W. Ross succeeded Peter Weill as the director of CISR. Peter Weill became chairman of CISR, with a focus on globalizing MIT CISR research and delivery. Drs. George Westerman, Stephanie L. Woerner, and Anne Quaadgras are full time CISR research scientists. MIT CISR is co-located with MIT Sloan's Center for Digital Business and Center for Collective Intelligence to facilitate collaboration between faculty and researchers.

MIT CISR is funded by Research Patrons and Sponsors and we gratefully acknowledge the support and contributions of its current Research Patrons and Sponsors.

CONTACT INFORMATION

Center for Information Systems Research MIT Sloan School of Management 5 Cambridge Center, NE25, 7th Floor Cambridge, MA 02142

Telephone: 617-253-2348 Facsimile: 617-253-4424 Email: cisr@mit.edu http://mitsloan.mit.edu/cisr



CISR RESEARCH PATRONS

Accenture DiamondCluster International, Inc. Gartner Hewlett-Packard Company **IBM** Corporation Microsoft Corporation

CISR Sponsors

Aetna Inc. Allmerica Financial Allstate Insurance, Co. Banknorth, N.A. Campbell Soup Company Celanese

Det Norske Veritas AS (Norway)

EMC Corporation Freddie Mac

The Gillette Company

The Guardian Life Insurance Co. of America

Intel Corporation

International Finance Corp./World

Merrill Lynch & Company

MetLife Mohegan Sun

National Kidney Foundation (Singapore)

Nomura Research Institute, Ltd. (Japan)

Ortho Biotech Products, L.P.

Pfizer Inc. PFPC, Inc.

Qwest Communications Raytheon Company State Street Corporation

TRW, Inc.