Determining capabilities of IT-enabled outsourcing service providers: A capability model and methods

Executive summary

October 4, 2001

Version 1.0

> Over each of the four years in Dun & Bradstreet's Barometer of Global Outsourcing, companies have reported that between 20% and 25% of all outsourcing relationships fail in any two-year period. Half of the relationships will fail within five years. The reasons cited for failure are remarkably similar across all types of relationships. Nearly 70% of the respondents note that the outsourcing supplier 'didn't understand what they were supposed to do' and 'the cost was too high and they provided poor service.'[1]

Introduction

In the last few years organizations, driven by increasing competitive pressures, are delegating one or more of their information technology-intensive business activities to an external service provider. In spite of reported problems, more than 30% of the organizations that have already outsourced one business process are actively searching for additional outsourcing opportunities in other areas.[2] The business processes being outsourced range from routine and non-critical tasks, which are resource intensive and operational in nature, to strategic processes that directly impact revenues. The rapid evolution of the global telecommunications infrastructure, and the increasing availability of bandwidth, has facilitated the design and delivery of outsourcing services from geographically distributed locations. Outsourcing service providers can now support multiple global outsourcing relationships, providing significant cost and quality benefits to their clients.

According to McKinsey & Co.[3], information technology-enabled outsourcing services are expected to grow fifteen-fold by 2008, and within the next 20 years are expected to grow to over a trillion dollars, with an increasing number of services using information technology (IT) as an enabler for performing activities including developing service designs, coordinating service deployment, and delivering services. Some examples of IT-enabled outsourcing service segments are remote customer interaction, data center management,

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[1] Ozanne, M.R. (February 29, 2000). Barometer of Global Outsourcing - The Millennium Outlook, *Sponsored by Dun & Bradstreet.* http://www.dnbcollections.com/outsourcing/bar1.htm.

[2] http://www.dnbcollections.com/qbarom.htm

[3] McKinsey (1999) Highlights of the NASSCOM, McKinsey Study report on IT enabled service segment, sponsored by the National Association for Software and Service Companies, India.

application service providers, content management and human resources. These services can be provided to different market sectors such as healthcare, finance, and consumables.

IT^{sqc} Capability Modelling and Certification

The Information Technology Services Qualification Center (IT^{sqc}) is part of Carnegie Mellon University's (CMU's) Institute for Software Research International (ISRI) in the School of Computer Science. IT^{sqc}'s mission is to address the emerging need for capability models and qualification methods, e.g., certification for organizations involved in the evolving networked economy. The IT^{sqc} is developing three interdependent capability-modeling efforts: (1) eServices Capability Model (**e^{scm}**)[4]; (2) eSecurity Capability Model; and, (3) eCommerce Capability Model (**e^{ccm}**). This executive summary focuses on the eServices Capability Model (**e^{scm}**) and its potential value for clients and service providers.

IT^{sqc} is creating partnerships and a consortium involving leading international corporate entities in the development of these Capability Models. For the **e^{scm}** effort, Satyam Infoway Ltd.[5], the leading e-business solutions and Internet infrastructure provider in India, is the founding partner in this global consortium. Current model development efforts are supported by Satyam Computer Services Limited[6], a diverse end-to-end IT solutions provider and one of India's leading IT organizations. For the eCommerce effort, IT^{sqc} is in a partnership with The Boeing Company and CMU's Software Engineering Institute (SEI).

The concept of outsourcing is not new. However, the frequently changing nature of IT-enabled outsourcing services, and the need for keeping in step with the emerging tools and expertise, introduce a higher level of complexity for service providers and presents risks for clients. The growing need to help clients determine a service provider's capability led IT^{sqc} to focus on this sector. The **e^{scm}** offers client organizations a means to select capable providers who are committed to delivering consistently high quality services and developing continually improving relationships. Also, we expect this model to provide guidance to service providers so they can more effectively manage IT-enabled outsourcing relationships.

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[4] **e^{scm}** is for the IT-enabled service providers. In 2002 a client side model for IT-enabled outsourcing will be forthcoming.

[5] www.sifycorp.com, (NASDAQ: SIFY)

[6] www.satyam.com, (NYSE: SAY)

e^scm Framework

The e^scm contains one hundred practices organized into three outsourcing phases (plus a category of practices covering the overall outsourcing process) and five organizational elements that are associated with successful outsourcing practices. Each practice is also associated with a capability level. Figure 1 shows the relationship of the phases, elements and capability levels in the e^scm framework.

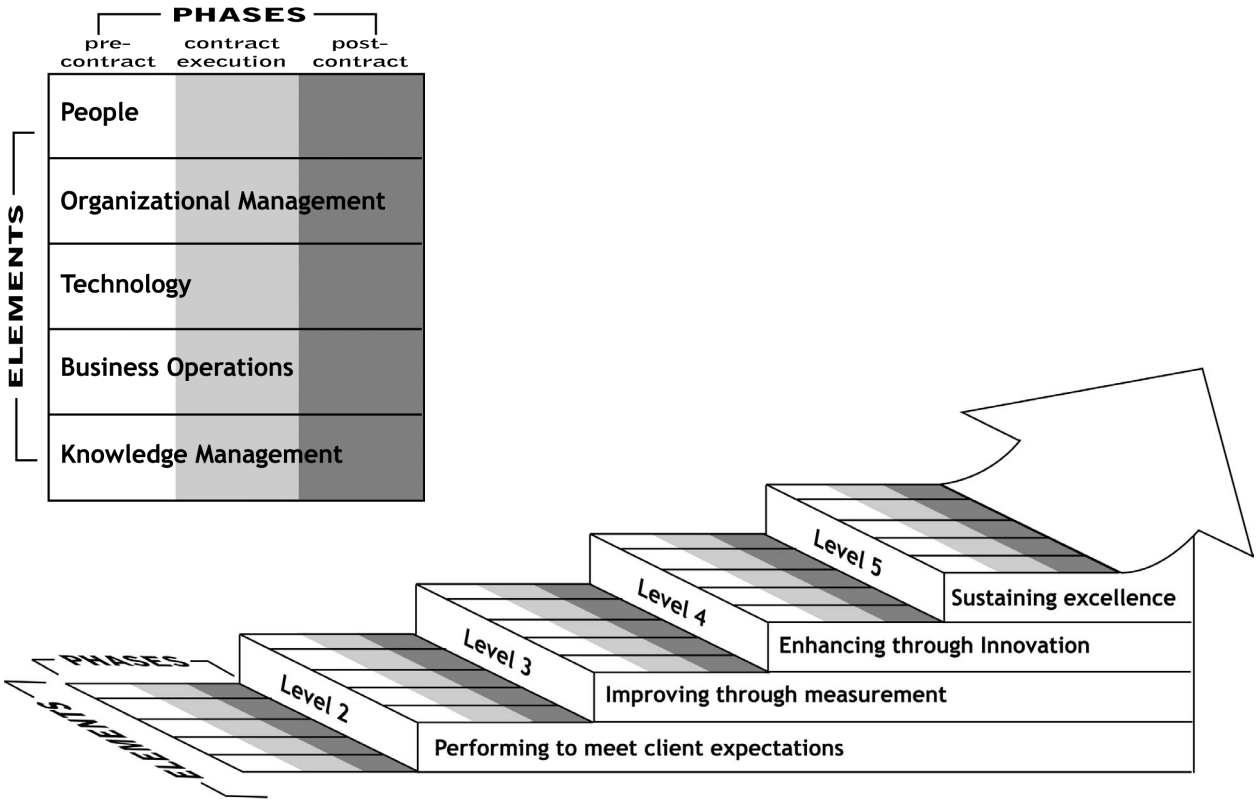

Figure 1: Overview of e^scm phases, elements and capability levels.

Phases

Existing models such as the International Standards Organization (ISO) and Malcolm Baldrige primarily focus only on the execution of a contract. The e^scm also addresses contract activities related to the design and deployment of an outsourced service and asserts that successful outsourcing necessitates a focus on two overlooked areas: (1) the activities leading to the formation of outsourcing relationships, and (2) the delivery, transitioning or termination of outsourced services. Thus, e^scm addresses activities critical to successful outsourcing not only in the contract execution phase, but also in the key pre-contract and post-contract phases of the outsourcing process.

Organizational Elements

In addition to attention to pre- and post-contract phases, successful outsourcing also requires the coordinated functioning of the organization across the outsourcing process. The **e**$^{\textbf{scm}}$ categorizes five Organizational Elements that are critical to successful outsourcing: Organizational Management, People, Business Operations, Technology, and Knowledge Management. The practices in **e**$^{\textbf{scm}}$ address the role of these Organizational Elements across the phases of the outsourcing process.

Practices

The **e**$^{\textbf{scm}}$ framework contains one hundred practices that address the critical capabilities for IT-enabled outsourcing services. These practices are defined as either Overall Practices or Phase-Specific Practices. Overall Practices are independent of the outsourcing phase and span the entire outsourcing process. Phase-Specific Practices are practices specific to an Organizational Element within each phase of the outsourcing process. Where applicable, the practices have been defined so as to be complementary, and compatible, with existing quality models such as those from the ISO, Baldrige or the family of Capability Maturity Models.

Capability Levels

The five Capability Levels of **e**$^{\textbf{scm}}$ describe an improvement path that clients should expect service providers to progress along from a minimal level of having the capability to deliver a service that meets client requirements, up to the highest level of enhancing value through continuous innovation. The five levels of capability that define this path are:

Level 1 - Initial;

Level 2 - Performing to meet client requirements;

Level 3 - Improving through measurement;

Level 4 - Enhancing through innovation; and,

Level 5 - Sustaining excellence.

At Level 1, service providers lack sound management practices. They operate without formalized systems and procedures, and even if a procedure has been specified it is not rigorously followed or enforced. Frequent crises, exceeded budgets and missed schedules are some of the other operational characteristics of such a service provider.

Thus, service providers at the Initial level are often unable to effectively address their clients' requirements. Working with these organizations carries a high degree of risk and may eventually lead to the defeat of the very purpose of outsourcing: increasing financial benefits or adding business value.

At Level 2, a service provider has formalized procedures for capturing requirements and delivering the service per commitments made to clients. At Level 3, such a provider is able to continuously learn from experience, and measure and control its activities. A service provider at Level 4 is able to proactively respond to changes in the external or internal business environment, in addition to enhancing the capabilities gained at Level 2 and Level 3. A demonstrated ability to enhance value to stakeholders and sustain capabilities at Level 4 for at least two years enables a service provider to achieve Level 5 – Sustaining Excellence.

e^{scm} - Appraisal and Evaluation Methods

The e^{scm} will be accompanied by evaluation and appraisal methods to identify, analyze and improve organizational capabilities. The e^{scm}-based evaluation method will enable clients to compare multiple potential providers with respect to the same capabilities, measured in a consistent manner. CMU-trained and authorized external agents will conduct evaluations of service providers. After a rigorous review of the evaluation data, CMU will issue a Certificate of Capability to qualified service providers. This evaluation method will aid in the analysis of the service providers' strengths, weaknesses and associated risks by measuring the extent of implementation and institutionalization of the practices defined in the e^{scm} . The appraisal methods also will enable service providers to determine their current capabilities and define targets for improvement.

A repository of data collected from participating organizations is being established at Carnegie Mellon's IT^{sqc}. The repository will provide status on state-of-the-art practices in IT-enabled outsourcing services, and may provide clients information on benchmark capabilities of service providers. It will also be used by IT^{sqc} to make changes, as necessary, to the e^{scm} to reflect the dynamic nature of the outsourcing industry.

The e^{scm} framework and initial certification method will be available from CMU so that Satyam Computer Services Limited and other select agents may use it to determine service provider capability in several IT-enabled outsourcing service segments prior to the end of 2001. For information about becoming a partner or member of the consortium please contact Dr. Jane Siegel at escm@cs.cmu.edu.