Chapter III

Service Portfolio Measurement (SPM):
Assessing Financial Performance of Service-Oriented Information Systems

Jan vom Brocke,
European Research Center for Information Systems (ERCIS),
University of Münster, Germany

Abstract

This chapter addresses service-oriented information systems from a management perspective. It is evident that running a service-oriented enterprise brings up new challenges for management. Given the technological opportunities, the challenge lies essentially in choosing the right mix of services on the basis of an appropriate architecture. For this purpose, strategic considerations regarding, for example, the company’s flexibility have to be justified by financial performance measures. This is particularly evident as long-term economic consequences result from decisions on the service portfolio. Thus, evidence is required about the fact that these decisions are in alignment with the company’s financial situation. The total costs of ownership (TCO) caused by a particular service-oriented information system, as well as the
return on investment (ROI) gained by it, give examples for appropriate financial performance measures. In this chapter, a measurement system is presented that facilitates the assessment of the various financial consequences within a comprehensive framework. The system is grounded in decision theory and capital budgeting, and it is illustrated by its application within practical examples.

**The Challenge of Managing Service-Oriented Information Systems**

In today’s markets, enterprises are increasingly forced to act flexibly. To do so, there is a distinct trend for enterprises to concentrate on core competences in order to gain strategic competitive advantages. As a precondition, information systems are required that incorporate means to support this flexibility. For this purpose, the concept of enterprise service computing offers promising ways to design a company’s information system. In service-oriented architectures (SOAs; Loh & Venkatraman, 1992; Weikum & Vossen, 2002), processes of an information system can be extracted and out-tasked to service providers. According to Keen and McDonald (2000), “Out-tasking…breaks a company into a portfolio of process-centred operations rather than interlocking departments or functions.”

The deployment of service-enterprise computing puts companies in a position to concentrate on their core competences by sourcing out parts of a process to service providers. In contrast to conventional outsourcing, out-tasking enables the companies to keep control of the entire process at the same time (vom Brocke & Lindner, 2004). According to Forrester, companies with a service-oriented architecture can reduce costs for the integration of projects and maintenance by at least 30% (Vollmer &

**Figure 1. Positioning out-tasking as a sourcing strategy**

[Diagram showing the positioning of IT activities based on their contribution to business positioning and criticality.]

Copyright © 2007, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.
Related Content

Managing the Replacement of Legacy HR System
[www.igi-global.com/chapter/managing-replacement-legacy-system/70313?camid=4v1a](www.igi-global.com/chapter/managing-replacement-legacy-system/70313?camid=4v1a)

Relational Dynamics and Outcomes in Small and Large Service Organizations
[www.igi-global.com/chapter/relational-dynamics-outcomes-small-large/74477?camid=4v1a](www.igi-global.com/chapter/relational-dynamics-outcomes-small-large/74477?camid=4v1a)

Reputation Management Through Online Feedbacks in e-Business Environment
[www.igi-global.com/article/reputation-management-through-online-feedbacks-in-e-business-environment/149440?camid=4v1a](www.igi-global.com/article/reputation-management-through-online-feedbacks-in-e-business-environment/149440?camid=4v1a)

Aligning Business Processes with Enterprise Service Computing Infrastructure
[www.igi-global.com/chapter/aligning-business-processes-enterprise-service/18477?camid=4v1a](www.igi-global.com/chapter/aligning-business-processes-enterprise-service/18477?camid=4v1a)