Chapter 4.12
IT Portfolio Management:
A Holistic Approach to Outsourcing Decisions

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ABSTRACT

This chapter provides an introduction to the advent of Information Technology Outsourcing (ITO) and its impact on portfolio management in modern day decision-making. Specifically, it outlines the use of the Application Portfolio Matrix (APM) by companies in formulating their strategic IT direction and why such techniques may be unsuitable for outsourcing decisions, which are inherently complex and multi-faceted in nature. Consequently, there is a need for alternative decision support tools to enable companies to determine how to "best-source" various aspects of their business. This chapter subsequently presents an analysis of ten outsourcing decision-making frameworks, identified from the literature, highlighting their commonalities, strengths, deficiencies and the potential misalignment between the theory and practice of outsourcing as determined by focus group discussions. This chapter gives a background introduction to the practitioner-driven Holistic Approach {Business, Information, Organizational} (HABIO) Framework, which adopts a holistic approach to outsourcing that examines underlying issues from the business, information (i.e. technical) and organizational perspectives. The framework adopts a "card/deck" analogy in its design, allowing for the flexibility and scalability required to accommodate the intricacies of heterogeneous outsourcing decisions in varying industry and context. The chapter outlines its application to two case studies, involving multi-million contracts from the finance and retail sectors, which is of particular interest to academics seeking accounts of current practices and practitioners seeking a systematic guide to ITO portfolio management.

INTRODUCTION

The outsourcing of Information Technology (IT) and business services has been receiving increased attention since the late 1990s, particularly in 1999 where there was a particular surge in offshore outsourcing as companies sought to resolve the Y2K problem (i.e. millennium bug). Since Eastman-Kodak's mega-deal (i.e. outsourcing contracts with total worth of over $1bn) in 1989, where outsourcing was perceived to be first formalized as a strategy, over 78 other mega-deals have been publicly announced. This meteoric rise is also reflected in the statistics and analyst predictions, which indicate that 88% of IT companies in UK currently utilize some form of outsourcing and that Business Process Outsourcing (BPO) will reach a market worth of $650bn by 2009 (Ravi, Bingham, Rowan, Danilenko, & McStravick, 2005).

The traditional concept of geographical boundaries has diminished in recent years, as advances in communication technology and the subsequently deregulation of telecommunications facilities have resulted in the ability for economically-viable international communication via data and voice networks (Namasivayam, 2004; Weinstein, 2004). With proliferated access to computing capabilities and emergence of collaborative groupware tools as a catalyst, the concept of virtual teamwork is now a reality, particularly for service-related functions (e.g. call centre operations and medical transcription). Hence, such functions are now being outsourced to knowledge workers around the world more on virtue of skills and capabilities and less on physical proximity.

At present, there are indications of Computerized Axial Tomography (CAT) scans from US hospitals being remotely analyzed in Israel and Magnetic Resonance Imaging (MRI) scans from UK hospitals being transmitted for analysis in Spain, which offers not only commercial revenue, but also altruistic opportunities for knowledge sharing. In such healthcare setups, the CAT scans are first taken within the US hospital, following which the digitized information is then transmitted via data networks to remote doctors based overseas in Israel, where the analysis and subsequent recommendation(s) on whether to operate can be made. Such information can be reviewed quickly because of the difference in time zones, thus allowing the CAT scans to be analyzed overnight (working day in Israel). This setup also provides coverage for the US hospital to deal with emergency cases arriving at night which require urgent attention. Due to the seamless integration of information interchange, boundaries between the US-based components and Israeli-based components are indistinct, and hence patients are often unaware that the hospital is essentially a virtual organization.

There is an increasing propensity for companies to consider offshore outsourcing, largely due to the promise of significant cost reductions (primarily from labor cost arbitrage), but also the potential to maintain round-the-clock availability (by exploiting time zone differences) and leverage foreign expertise. This has made countries such as India and China attractive offshoring locations for a myriad of industries, ranging from laptop production to remote tutoring. Niche markets have also developed, such as Taiwan for research and development of Personal Digital Assistant (PDA) components and South Africa for insurance claims processing.

Despite the various realizable benefits associated with outsourcing, it is not without its risks, just like any other business moves (Aubert, Patry, & Rivard, 1998; Earl, 1996). Hence, companies which fail to consider outsourcing as a strategic decision (often eliciting to rely solely on computational cost analysis instead) tend to encounter financial consequences, as illustrated by a supermarket group's cancellation of its $3.3bn outsourcing contract in 2006, which resulted in termination costs of $128m (Hadfield, 2006).