Chapter 4.1

Subrata Chakrabarty
Texas A&M University, USA

ABSTRACT

The primary purpose of this chapter is to present descriptive real-life case studies of different offshore-outsourced custom software development projects (that the author has actually worked for). The first case study discusses the practical issues in two fixed-term/fixed-price custom software development projects that were offshore-outsourced. The second case study discusses the practical issues in the offshore-outsourcing of a time and materials custom software development project to multiple vendors, which involved simultaneous insourcing, onshore-outsourcing and offshore-outsourcing. Furthermore, the observations and issues from these case studies are analyzed by comparing them with the paradigms of socio-economic theories that have been adopted extensively in the academic IS outsourcing literature (namely the agency theory, transaction cost theory, innovation diffusion theory, social exchange theory, and power-politics theory).

INTRODUCTION

Companies worldwide are under increasing pressure to cut costs. The price of associated software is often the deciding factor on whether to upgrade to newer and better alternatives.

Every company wants to use the best software — not just to beat the competition, but sometimes to remain in the competition. The lure of low costs and the desire for high software quality has forced companies in advanced economies to look across the horizon.

Case study-1 discusses the issues in two fixed-term/fixed-price custom software development projects that were offshore-outsourced. Case study-2 discusses the issues in the offshore-outsource-
outsourcing of a time and materials custom software development project to multiple vendors, which involved simultaneous insourcing, onshore-outsourcing and offshore-outsourcing. The two case studies explain two very different approaches to offshore outsourcing of custom software development, and attempt to be of practical significance to managers and software professionals by analyzing the issues involved. The case studies provide insights into the practical and real life strategies adopted by managers to solve issues and problems in offshore-outsourcing and hence will be of value for the readers.

The observations and issues from these case studies are further analyzed by adequately comparing them with the paradigms of socio-economic theories that have been adopted extensively in the literature to study IS outsourcing. To achieve this objective, extensive literature review has been provided both in the introductory sections of this chapter and also in the later sections where the case-studies are related to the theories and paradigms. Hence, an earnest attempt has been made by the author to relate the practical real-life experiences of working in offshore-outsourced projects to the paradigms in the academic literature. This chapter can also be used for instructional purposes for teaching cases in offshore-outsourcing of custom software development projects.

It is assumed that the reader has sufficient knowledge about the fundamental concepts of insourcing, outsourcing and offshoring, and hence before we review the literature for socio economic theories and before we analyze the case studies, we proceed to only briefly describe the reasons behind the growth in offshoring of IS work, and also the primary factors that influence the choice of whether to insource or outsource.

**Discovering New Lands: The Move to Offshore**

Overall there is a bright outlook for offshore sourcing of IS functions. Carmel and Agarwal (2002, p. 73), note the following: Our assessment is that growth will continue in sourcing IT work offshore for a number of years to come. While the growth rate slowed somewhat in 2001-2002, corporate pressures to reduce costs remained strong. However, putting a figure on the global offshore picture is difficult. Adventis, a research firm, estimates that U.S. firms will spend some $7 billion on third-party offshore IT work in 2002. Narrower figures give more guidance: Forrester, a U.S. research firm, found that 44 percent of U.S. firms with more than $1 billion in revenues performed IT activities offshore in 2001, and Forrester estimates that percentage will grow to 67 percent by 2003 (for comparison purposes, a Fortune 1000 firm has $1.2 billion in revenue). Note, though, that these estimates do not include offshore sourcing to wholly owned facilities. Furthermore, offshore sourcing is but a small slice of the global market in IT outsourcing (both domestic and offshore), which is estimated to be more than $100 billion (and again, this figure does not include insourcing).

In the same vein, Dibbern, Goles, Hirschheim and Jayatilaka (2004, p. 90) note the following:

Even the popular press (Business Week, 2003; USA Today, 2003) have reported on this issue noting that as much as 50% of IT jobs will be offshored to India and other off- and near-shore destinations in the next 10 years. Such change it is argued is nothing more than the natural progression of first moving blue-collar work (manufacturing, textile production, etc.) overseas followed by white-collar work.

Offshore sourcing of IS will continue to grow for the following reasons:

1. **Modular design of certain IS tasks:** Modular design of certain IS tasks (e.g., software production) aid the offshore sourcing phenomena due to reduced transactions costs (cost of coordinating work activities