Chapter 2.6
Planning for Information Systems Outsourcing

Vijay K. Agrawal  
*University of Nebraska–Kearney, USA*

Donald A. Carpenter  
*Mesa State College, USA*

**ABSTRACT**

This chapter presents an overview of the pertinent aspects of planning for the outsourcing of information systems projects. The first major section of the chapter presents a historical perspective on the evolution of information systems outsourcing practices so the reader can understand subsequent sections of the chapter in context. The next major portion of the chapter deals with the need to examine goals, strategies, core competencies, and critical success factors as well as presenting all the functional areas of information systems that are candidates to be outsourced. Also included are discussions of the need to perform cost/benefit analysis and to consider cultural and other factors. The concluding section deals with all the factors that should be examined in preparing and administering outsourcing contracts.

**INTRODUCTION**

No industry has been affected more by outsourcing than the information sector! That has been both a boon and a challenge to information technology firms. For decades, as businesses in all industries have realized their lack of internal expertise to develop or manage their own information systems, they have outsourced portions or all of their IT departments to firms that specialize in that expertise. Yet, as salaries escalated for those with that needed IT expertise, general businesses as well as the IT firms themselves have turned to developing countries to provide the expertise at a lower cost. Thus, off-shore outsourcing, or off-shoring, is exploding.

During the time of the amazing growth of the information sector of developed countries, there was an arrogant claim that it was natural to lose
manufacturing jobs to foreign countries because that job loss would be exceeded by information technology companies which were said to have some form of exclusive hold on IT expertise. Reality is expressed more appropriately as:

*Our labor force is not better trained, harder working or more innovative than our foreign competitors. The argument that we will create jobs in highly paying fields is simply not true. We have no comparative advantage or superiority in innovation. To assume that we are inherently more creative than our foreign competitors is both arrogant and naive. We are currently empowering our competition with the resources to innovate equally as well as we.* (Warren, 2005, www.computerworld.com)

Rather, leaders in the IT field now see outsourcing as a natural evolutionary step in IT (McNurlin & Sprague, 2006, p. 304). Global competition affected only 10% of the U.S. economy in the 1960s, but rose to 70% in the 1970s and is arguably 100% today, as no businesses escape the impact of the global economy. In order to compete in that global economy — especially when the gap in the costs of local vs. off-shore labor looms so large — a majority of businesses must turn over some business functions outsourcing and off-shoring to be competitive. Due to their technical nature, IT functions are logical candidates for such outsourcing for a significant percentage of businesses. Consequently, outsourcing and off-shoring of IT functions is not just an IT issue, it is a primary business issue.

The purpose of this chapter is to provide a planning framework for the outsourcing of IT functions. First a brief historical perspective is presented in order for the reader to appreciate what has worked in the past as a predictor of what might work in the future. That is followed by a description of factors to consider prior to outsourcing information systems projects. Next the chapter presents an extensive examination of IS functions that are logical choices to outsource. Last is a discussion of how to contract for outsourcing and how to manage such contracts.

**EVOLUTION OF INFORMATION SYSTEMS OUTSOURCING PATTERNS**

Outsourcing has been an important information systems practice since the beginning of the computer industry in 1951. When a firm purchases prewritten software, it in effect has outsourced the processes of design and construction of programs. When a company retains a consultant to help identify information requirements, it has outsourced. When an enterprise hires a company to maintain its computer systems, it has outsourced. When a user organization acquires services from a value added network provider, it has outsourced (Singhal, & Singhal, 2002, p. 290).

The specific reasons for such outsourcing vary from one organization to the next. However, in general, the reasons boil down to one factor. It is less costly for the purchasing company to turn outside rather than do the work in-house (Niccolai, 2005). Perhaps it does not have the expertise and it is less costly to buy the expertise than build it. Perhaps it does not have the time to pull off a project. Perhaps it can take advantage of the economy of scale that the supplier has and which the purchasing company does not. Regardless of specific reasons, the host firm turns to outsourcing to save money.

Gradually, that gave rise to the growth of huge outsourcing firms such as Electronic Data Systems (EDS), to software giants such as Microsoft, and to consulting divisions within other companies such as in all the major accounting firms. It spawned the growth of the computer communications portion of the telecommunications industry. Furthermore, it provided myriads