Chapter XVIII
Innovative Technological Paradigms for Corporate Offshoring

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ABSTRACT

Internet technology has impelled us to develop faith in the modern practices of business, commerce, and trade. Offshoring has been viewed as a global phenomenon on the economic frontier. While new technologies need to be framed, stopgap arrangements in the form of transient solutions to upgrade the current systems are also desired. Newer regulations and multi-jurisdictional compliance have profound impacts on the growth of outsourcing projects. The development of new technological solutions must challenge the myth that legislation and statutory practices are the only possible mechanisms to counter the unscrupulous activities in the context of outsourcing. A change in the outlook toward such methodologies is essential to shed away the technological inertia and latency. This chapter opens up discussion issues in the perspective of hardware and software requirements for efficient offshoring. The aim is to achieve higher precision, protection, and throughput by applying core-computing techniques to the existing practices of outsourcing.
INTRODUCTION

The information and communications technology (ICT) revolution has triggered the economic development at collaborative and cooperative levels. Internet-based infrastructure provided impetus for outsourcing projects to hubs such as India, China, and the Philippines. Bednarzik (2005) indicates that due to its emerging nature, there is no universally accepted definition of offshoring. While the industry professionals use outsourcing and offshoring terms interchangeably, IEEE and ACM believe that when a U.S. company gives work to companies in other nations like India, it is outsourcing (and not offshoring). A general business expansion trend, including an outreach program, is to explore potentials of other nations for widening an organization’s horizons (Friedman, 2005). Considering this general view, offshoring, outsourcing, and subcontracting need to be distinguished. A report of the ACM Job Migration Taskforce (Aspray, Mayadas, & Vardim, 2005) looked at the issue from a global perspective, as compared to a country-centric one in the context of rapid globalization of IT and the migration of jobs resulting from outsourcing and offshoring. The report clearly defines the following two terms:

- **Outsourcing** refers to having work for a company done by another organization.
- **Offshoring** refers to having this work done in another country, whether or not it is done by part of the same company.

This leads to a partially overlapping definition of outsourcing and offshoring. Transferring a part of the workload from a host location to another adjunct destination can broadly represent the meaning of these two terms. Predominantly, the host and the destination locations are in different countries. The authors explore the possibility of such situations from the previous perspective, that is, not adhering to a fixed definition. Such an approach is necessary for a global outlook, wherein the participation of developed and developing nations is at equal stake levels (Farrell, Kaka, & Sturze, 2005). Both subcontracting and offshoring/outsourcing have impact on work force realignment. The fears, however, are disjoint. Subcontracting may result in a partial relocation of the workforce with ensured job security. Such a possibility is absent in offshoring/outsourcing. In this context, the *theory of comparative advantage*, propagated by the economics of offshoring cannot be applied to subcontracting.

With the introduction of business models in the developing nations for managing the available workforce and the infrastructure, the ICT industry paved the way for the foundation of first generation outsourcing oriented corporate models (FG-OOCM) for expanding commerce. The FG-OOCM has opened up various issues for outsourcing-based research, and a need for deploying technological solutions to offshoring activities is being felt. For example, consider a situation where Mexican, Indian, Chinese, and American people work together in an outsourcing-based system. In such cases, knowledge management is a challenge and a need for introducing technological solutions is felt. Although distinct units, rules, and documents of each participating organization can be considered as *explicit knowledge*, these do not make knowledge for the entire outsourcing system. Information and knowledge are interdependent, but information per-se contains no knowledge. Some of the issues of knowledge management in software engineering (Desouza, 2003) are applicable to outsourcing. In general, outsourcing system operations are performed by outside contractors, and the terms of understanding between the client and the contractor for outsourced services are defined based on distribution of responsibility, liability sharing, and performance monitoring. These issues require managing of electronic records and evidence, impose legal compliance requirements, and need to be viewed from the perspective of technology as opposed to that of mere administration.