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## **Chapter II**

# **An Approach for Managing an IT Skills Portfolio**

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## **Abstract**

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*In this chapter, the focus is on best practice for IT skills portfolio management. To begin, we formulate the key principles or mission statement for IT skills portfolio management based on the previous chapter. Under the principles enumerated there, this chapter outlines how to build an IT skills portfolio, and then looks at how to apply the portfolio at the firm and the individual IT professional levels.*

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## Introduction

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From the discussion of past studies in the preceding chapter, we develop a framework for managing IT skills at the firm level. The gist of such a framework is summarized in *Appendix A: Birds-Eye View on IT Skills Portfolio Management* as well as in *Appendix B: The IT Skills Portfolio Management Framework*. Appendix A summarizes what this chapter presents in a figure. Appendix B shows the skeleton of the managerial steps for planning and managing IT task forces at the firm level.

At the beginning, we derive key guiding principles for IT skills management from the past lessons and today's business and IT environments. The first principle (*people-centered organization*) is drawn from human resource management. We derive the second principle (*multi-mission capability*) from two phenomena. First, today's economic and competitive conditions are forcing us to do more work with fewer people. Second, the growth of new IT technologies has brought us more complex interactions between IT devices and systems, as well as between IT and organizations. The third principle (*work-based learning*) comes from two directions. As the pace of technological innovations gets faster, IT professionals have no choice but to keep learning to stay current with IT innovations. Also, the preceding chapter emphasizes the importance of anchoring IT skills to business and task goals. Consequently, it is important that we use these three guiding principles to construct a framework for managing IT skills.

The main thrust of the IT skills portfolio management framework is to focus on business goals and the critical tasks for accomplishing these goals. As the appendixes show, the proposed framework binds business goals to what IT professionals have to do to accomplish them. The framework consists of the following four steps:

- (1) Clearly recognize business goals.
- (2) Translate business goals into what IT projects have to accomplish.
- (3) Define IT skills based on deliverables of IT projects.
- (4) Determine the best option for IT skill sourcing.

In these four steps, we use 2x2 matrices with the time dimension (now vs. future) and the criticality assessment dimension (how crucial, how difficult, and

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