Chapter XII

Using an Intranet to Manage Knowledge for a Virtual Project Team

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Introduction

The Year 2000 (Y2K), or millennium bug as it has been called in the popular press, has caused many organizations to form Y2K project teams tasked with finding and fixing date problems in critical applications, embedded systems, and IT infrastructure. Most of these projects have had to perform this task under severe time restraints, typically two years or less. Additionally, these projects have been constrained with limited resources and staff. Project teams needed to maximize utilization of knowledge and experience gained during the project so they could perform to their maximum capability. Continued viability of the organization was at stake in most of these projects.

One of the key problems to maximizing knowledge utilization is leveraging knowledge gained by a project member or sub-team with the rest of the project. An example of how one such project implemented knowledge management to optimize knowledge sharing is described in this chapter. The example project is in a large electric utility in the western United States and was focused on the assessment, testing, and remediation of physical assets/embedded systems. Since this utility is spread over approximately 50,000 square miles, a virtual project team was formed. The leadership for this team con-
sisted of the project managers from the different company departments that had physical assets including transmission, distribution, nuclear, hydro generation, steam generation, facilities management, customer service, transportation, and company affiliates, and was led by the physical assets manager from the corporate Y2K project office. The rest of the team was comprised of engineers and technicians from each of these departments. The number of team members varied over the life of the project, peaking at approximately 150, and was dispersed to approximately 15 locations. As the project team perceived they were lagging the industry in getting ready for year 2000 a strategy was formulated that utilized knowledge management as one of the keys to accelerating project performance. The knowledge management strategy included:

1. Bringing in knowledge from outside the organization to conduct training and review project procedures.
2. Integrating project data management into the existing work processes used by the various project sub-teams.
3. Building a site on the corporate intranet where knowledge could be communicated and shared with the project team through project guidelines refined with knowledge from experience and links to member expertise; and by posting and sharing test plans and results.
4. Linking to industry knowledge through an industry-specific extranet.

The key strategy point for this chapter is the intranet and extranet sites created for the project. This chapter describes how the intranet and rxtranet were designed and utilized. Comparisons to the utility industry as a whole will then be used to show that this project went from lagging the industry average with respect to project completion, to being an industry leader. This performance is attributed to many factors, one of the main ones being the use of knowledge management and specifically the use of intranets and extranets.

**Previous Research**

This section presents the theoretical basis for the design of the knowledge management strategy and system used by the organiza-
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