



Chapter XX

Information System for a Volunteer Center: System Design for Not-for-Profit Organizations with Limited Resources

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EXECUTIVE SUMMARY

This case focuses on the development of information systems for not-for-profit volunteer-based organizations. Specifically, we discuss an information system project for the Volunteer Center of Racine (VCR). This case targets the analysis and design phase of the project using the Unified Modeling Language (UML) methodology, database modeling, and aspects of project management including scope and risk management. Students must decide how to proceed, including recommending an IT solution, managing risk, managing scope, projecting a schedule, and managing personnel. The rewards and special issues involved with systems for not-for-profit organizations will be revealed. This case can be used in a variety of courses, including systems analysis and design, database management systems, and project management.

ORGANIZATIONAL BACKGROUND

Jeff McCoy, project lead of a four-person project team, was finishing requirements and project status documentation related to an information system for the Volunteer Center of Racine (VCR). Jeff, the information systems team, and the client needed to make some important decisions concerning the future of the project. Jeff needed to formulate his own opinion, but it was getting late. He promised his fiancé that they would see a movie at the new cinema tonight. Recently, his promises have gone unfulfilled.

To this point, the VCR project had progressed smoothly. The focus of the project was the development of an application that helped the VCR place and track volunteers at various volunteer opportunities. The development team used the Unified Modeling Language (UML) to document the requirements of the system (Booch et al., 1999). A Gantt chart and a standardized project status report were used to record progress. The project status report contained fields to record the time, budget, people, process, and technology status of the project (Appendix B). A color code was used in each field: Green meant that the item was on task, yellow indicated concerns, and red signaled a danger. In addition to these fields, the team had an opportunity to specify their confidence in the project. A high score signaled that the project was moving along well and was within budget. The previously filed status reports were all very positive.

Jeff and the other development team members, themselves, were volunteers at the Information Technology Practice Center (ITPC). The ITPC is a consortium of IT professionals from the local university and industry. The ITPC provided consulting services for not-for-profit agencies and small businesses. Some of the consulting engagements, including the VCR engagement, were performed on a pro bono basis. Many of the engagements involved students so that the students could obtain experience with live IT projects. The project status reports were sent to the ITPC executive committee.

Jeff was concerned that the next status report would not be as positive. At the most recent team meeting, several issues emerged. First, the project team disagreed about the quality and adequacy of the UML documentation. Jeff made changes to the documentation produced by some members of the team, and these members took offense. Jeff wondered whether they had captured all of the key requirements and had accounted for these requirements in the project plan. Second, volunteer placement and tracking was not the only need of the VCR. Marilynn, the primary contact at the VCR, also needed a system to track donors and expenses. These additional features were part of the original project scope, but it was not clear whether the IS team could deliver a system with this functionality by the target delivery date in August. Third, other options emerged besides a custom-developed solution, including purchasing an off-the-shelf package. Jeff and the project team needed to recommend a particular approach. Finally, a recent problem emerged regarding the computer network. This problem must be solved before any solution is implemented. Could the team deliver the system within the target timeline?

Client Mission & Organization

The Volunteer Center of Racine (VCR) is a not-for-profit organization located in Racine, WI, a city with a population of 85,000. While it primarily serves the county of Racine, it also services occasional requests from nearby counties. Volunteer organiza-

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