Deploying Distributed Computing: Parking Gets a New System

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EXECUTIVE SUMMARY

This teaching case describes the efforts of one department in a large organization to migrate from an internally developed, mainframe-based, computing system to a system based on purchased software running on a client/server architecture. The case highlights issues with large scale software implementations such as those demanded by enterprise resource package (ERP) installations. Often, the ERP selected by an organization does not have all the required functionality. This demands purchasing and installing additional packages (known colloquially as "bolt-ons") to provide the needed functionality. These implementations lead to issues regarding oversight of the technical architecture, both project and technology governance, and user department capability for managing the installation of new systems.

BACKGROUND

The parking department of a large southwestern university is the setting for the deployment of a new client/server-based system that uses purchased software. This effort is discussed from inception through post-implementation. Issues covered in this case include project management, implementation planning, vendor management, and balancing responsibilities between cen-

tralized and distributed information technology groups. This discussion is set within the context of the university's decision to change its computing infrastructure and to purchase an enterprise resource package to replace its aging, and homegrown, mainframe-based systems.

LEARNING OBJECTIVES

This case is intended for either senior-level undergraduates or early-career master's students. Upon completion of this case, the learner will be able to:

1. Determine, and be able to discuss, both the major issues and key stakeholders affecting deployment of distributed computer-based systems. This includes the:
   - technical constraints
   - organizational levers and
   - change management concerns.

2. Determine, and be able to discuss, issues regarding the emergence of multiple centers of technology expertise inside organizations (due to the distribution of computing).

3. Determine, and be able to discuss, the issues with purchasing, instead of building internally, computer systems.

PREPARING FOR THE CASE

It is important to have an understanding of distributed computing and client/server concepts to assist in developing this case. If you do not, or would like a refresher, please read Harvard Business School teaching note 9-195-211 (by Geoffrey Bock and Linda Applegate) on Client/Server Computing. This note provides an overview of client/server computing (the dominant form of contemporary distributed computing systems) and issues with both the business value of client/server computing and some of the managerial aspects of these types of computer systems.

DEPLOYING DISTRIBUTED COMPUTING: PARKING GETS A NEW SYSTEM

Having finished preparing his presentation, Ed Morales sat in his office late that Thursday night in June 1998. As director of facilities at a large

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