Cisco Systems: Implementing “Customized” ERP in Nine Months and within Budget

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EXECUTIVE SUMMARY

This case illustrates the importance of vendor selection, top management support, and team structuring in implementing a complex ERP system. While most organizations choose the de-facto brand as their product, Cisco and its consulting partner, KPMG, went against this perception and selected Oracle who was a newcomer in ERP business. For Oracle this was a golden opportunity to enter a market dominated by SAP and get its ERP modules litmus tested by an industry leader. Cisco on the other hand agreed to help Oracle to market its latest releases to potential customers, in lieu of the successful implementation. Oracle even allowed changing some of its modules to fit Cisco’s purposes. The implementation team comprised the best people from Cisco, KMPG and Oracle. To have the customized ERP up and running in nine months the team blended the robustness of sequential life cycle model with the flexibility of the iterative prototyping. [Article copies are available for purchase from InfoSci-on-Demand.com]

Keywords: Cisco; Contract Negotiation; ERP Implementation; Information Systems Project Management; Oracle; Systems Development Lifecycle; Top Management Support

ORGANIZATION BACKGROUND

Cisco Systems, Inc. was founded in 1984 by two computer scientists from Stanford University. Their primary product was the “router” that controlled the flow of data between the complex TCP/IP networks that made up the Internet and corporate intranets. Demand for Cisco’s products increased dramatically with the rise in the use of Internet after 1990. By 1993 Cisco was a $500 million company and in 1997 Cisco it ranked among the top five companies in return on revenues and returns on assets. In the same year, Cisco entered the Fortune 500 and reached a market capitalization of over $100 billion.

Don Valentine, partner of Sequoia Capital and vice chairman of the board of Cisco, was the first to take initiative and pave the path for the young company. He appointed John Morgridge as CEO in 1988, whose first effort was to build a professional management team. His management
team clashed with the founders of Cisco systems, which resulted in departure of the founders after the company’s initial public offering in 1990. This eventually enabled CEO Morgridge to implement an extremely disciplined management structure within Cisco. He maintained a centralized functional organization that continued approximately the next 10 years.

**Setting the Stage**

Cisco’s IT infrastructure was supported by a UNIX-based software package to conduct its core transaction processing tasks. The package supported the three key functional areas of the company: finance, manufacturing, and order entry. Pete Solvik, CIO of Cisco, analyzed the UNIX-based software package and found that it did not provide the degree of redundancy, reliability, and maintainability that Cisco needed to keep up with their current business demands.

Unreliability and regular outages brought into question the soundness of trying to modify the current system to meet Cisco’s constantly growing needs. An upgrade was made available, which was a solution that offered more reliability and redundancy without maintainability or room for growth. An upgrade from their current software vendor could not suffice for their changing needs.

The management structure in 1993 was such that each functional business unit made its own decisions regarding the future of their IT systems. IT representatives from each department were asked to report the expenses to Slovik. Each department head knew that further “band-aiding” the current system was not going to be sufficient to keep up with the company’s rapid growth. However, no individual was willing to approach the board with a costly and lengthy proposal for replacement of the legacy systems.

Solvik’s initial intention was to avoid an ERP solution because of implementations and cost overruns. In addition, Cisco’s independent department structure was contrary to organizational structure supported by ERP system. Thus, Slovik planned to let each functional area within Cisco make its own decision regarding the software application that they wanted to use. However, all functional areas were required to use a common architecture and database to maintain standardization within the company.

**CASE DESCRIPTION**

**Failure of the Existing System**

The year 1993 witnessed little change in the software support system at Cisco. None of the departments actually got itself a new and updated package. Instead, they kept operating by fixing the existing systems and somehow managed to carry on. In late 1993 Randy Pond, Senior VP of Operations at Cisco, confirmed that fixing the existing system was pointless as it would not serve the growing needs of the firm. Finally, in January of 1994, Cisco’s legacy environment entirely failed, resulting in companywide shut-down for almost 2 days. This was a shortcoming that could no longer be ignored. A number of managers at Cisco came to the conclusion that the autonomous approach to systems replacement would not suffice any longer.

Solvick, along with other managers, put together a plan to take on replacement of all faulty legacy applications in a single ERP project that would provide a common data architecture throughout each business unit. The analysis below will describe in detail the points of their implementation approach, why the project was successful, whether the success was “smart” or
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