Cisco systems,inc: implementing erp essay sample

In 1994, Cisco Systems, Inc. was on the verge of an internal breakdown. The company experienced exponential growth in response to businesses' demand for Internet technologies and data systems. Unfortunately, the UNIX-based software package the company used at the time couldn't keep up with its sudden growth. After a system failure that caused Cisco to shut down for two days, the management team decided to proceed with plans to implement a new ERP system. This paper provides an in-depth analysis of the process used to implement the new system, and an assessment of its overall effectiveness.

Case Synopsis

Cisco Systems, Inc. designs, manufactures, and sells Internet Protocol (IP)-based networking and other products related to the communications and IT industry and provides services associated with these products and their use. (Datamonitor) It offers technical solutions that encourage collaboration, provides virtualization, and creates enterprise networks in small, midsize and large businesses The company established a competitive advantage in the early 90s, shortly after it was founded due to the rapid rise in Internet technologies and demand for technical services during that time. The high demand for this type of service catapulted Cisco into becoming a Fortune 500 only 14 years after its inception. Although the company structure and programs were an initial success, the presence of " growing pains" began to plague Cisco, causing major delays in service.

As with any technology, Cisco's legacy UNIX-based software package became obsolete in its ability to meet the rapidly growing company's needs. Constant efforts to customize and bandage existing systems worsened the

applications capabilities and caused frequent systems outages. A defining moment occurred when Cisco's legacy system malfunctioned and the company had to shut down for two days. In order to avoid a complete systems failure, Cisco executives knew that replacing the existing application systems was imperative to the functionality of the company. Instead of executing replacements for each application needed, the executives decided to make a single overhaul of all of their applications in one large scale project.

The challenges that Cisco faces include: getting approval to switch to an entirely new system, establishing and meeting a realistic deadline, creating a solid roll-out plan, putting together the right team to execute the plan, and addressing issues that surface before, during, and after the entire process. Strategy Analysis

Part of Cisco's underlying success is the evidence of a corporate vision outlined by clearly defined goals. The company strives to change the way the world works, lives, plays and learns. In order to achieve this, the company has implemented a business model that has proven successful thus far. The main focus of Cisco is to define true innovation and operational excellence within their company (Datamonitor). It does this by investing in ongoing innovation to develop world-class technology, anticipating tomorrow's opportunities, and hiring or partnering with the most qualified experts in the field. Cisco embodies this same vision in the execution of its ERP implementation project. In continuing with their focus on fostering meaningful partnerships, Cisco's management team hand-picked

leaders in the business community to participate in the ERP product selection process.

They also chose KPMG, a global auditing, tax, and advisory firm, to participate in both the product selection and implementation processes. This original team was created to carefully and strategically choose the vendor whose product would best meet the needs of Cisco's rapidly growing business. The next thing that the management did was outline clearly defined goals by setting a timeline and cost for the completion of the project. It was determined in the early stages of the project that the entire system should be switched over in 9 months with a cost at roughly $15 million. The planning of Milestone Implementation Dates (See Appendix) served as a benchmark to ensure that substantial progress was being made (Austin).

After selecting the right vendor and setting a deadline for the " big switch", the management at Cisco was ready to tackle the most difficult part of the project. The implementation phase would prove to be unapologetically challenging. In order for the switch to go smoothly, this piece of the project would have to be well planned and executed by a team of experts (See Appendix). The implementation team consisted of 100 members split into 5 different tracks. Each track consisted of a business lead, an IT lead, a business consultant, and an IT consultant. Representatives from Cisco, KPMG and Oracle were represented in each group (Cisco).

Once the structure of the implementation team was clearly defined, the prototyping phase began by executing a series of Conference Room Pilots (CRPs). The purpose for this part of the process was to generate a deeper

understanding of the functionality of the software relative to Cisco's needs. The team executed four phases of CRPs before approving the " Big Switch". All of these decisions combined represent Cisco's strategy in the ERP implementation project. The management team outlined clearly defined goals, selected a highly qualified team, established a strong partnership with KPMG, and promoted operational excellence through the use of CRPs. Problems in Business Processes and Operations

The strategies mentioned above were designed to address the numerous problems that Cisco began to experience in the early 90's. The company faces the possibility of internal destruction if it does not adopt an ERP system that has the capacity to handle its everyday operations (Chen). The UNIX-based software package initially used by Cisco supported financial, manufacturing and order-entry activities, but the company's needs outgrew the existing program, and attempts to modify the application caused the deterioration of a once reliable system.

The numerous modifications to the program caused a series of outages that were difficult to recover from, and eventually, a corrupted central database caused a two day shutdown (Austin). The system had become too customized, and Cisco needed a strong system with a huge capacity that would need little to no modifications to function. Pete Slovik, CIO of Cisco, wanted to avoid an ERP solution and had originally planned to allow each functional area to make its own decision about which application to choose. This would have been time-consuming and tedious when dealing with multiple application selections. It was eventually decided that one massive overhaul needed to happen. Firm Based Value Chain Model

The value chain is a model that firms can use to analyze activities that create a competitive advantage. The primary value chain activities are: Inbound logistics, which deal with the receipt and distribution of raw materials; Operations, which transforms inputs into finished goods; Outbound Logistics, which is the warehousing and distribution of finished goods; Marketing and Sales, which identifies customers' needs and generates sales; and Service, which supports customers after the sale.

The overall value of the activities in the chain should exceed the cost of providing the product or service, which would result in a profit margin. This model should be used to describe firm-based operations and decision making levels because it highlights interrelationships among business units and linked activities that may affect each other when decisions are made. It is also a useful analysis tool that identifies actions within these activities that may result in a cost advantage or product differentiation. Model Application

The value chain model applicable to Cisco's Implementation of the Oracle ERP would look like the model below:

CISCO's ERP Implementation Value Chain Model
Inbound Logistics
In this case, inbound logistics would represent the initial acquisition of the product from Oracle. The ERP product and support package is in its original state as designed by the vendor. These products are received and prepared for testing. Operations

The ERP product is taken though a battery of tests administered by each track of the implementation team. Flaws are discovered and addressed until

the program seems functional enough to launch. The IT team focuses efforts towards implementing a data warehouse that receives and stores information from every department. Former codes and procedures are changed to support the new system. Historical information is linked to the data warehouse for easy retrieval. The additional support package is merged with the ERP system. Outbound Logistics

The system switch-over occurs during this stage of the value chain. The ERP program is implemented and each department evaluates the system in regards to how well their needs are actually being met. It is during this time when unexpected issues surface. Cisco discovered that the software didn't have the ability to handle the transaction volume that the company requires. This occurred as a result of an oversight during the testing process. Marketing and Sales

Since this product will be used in-house, the marketing and sales aspect of the chain will be analyzed from the perspective of Oracle. This project represented the launch a new release of Oracle's ERP product. As a part of its deal with Oracle, Cisco helps market the product by doing references, allowing site visits and talking to companies who are in the process of making a similar purchase decision. Service

Once Cisco becomes fully dependent on the new system, the occurrence of small issues will still be possible. Team members from Oracle, KPMG, and the hardware vendor are readily available to make tweaks, add capacity and stabilize the system when needed. Implementation Opportunity Analysis

Before analyzing the situation for implementation opportunities, one must first pinpoint the problems encountered in the different functional areas of Cisco. The Order Entry and Manufacturing departments both heavily rely on IS in their everyday processes. Prior to the decision to adopt an ERP system, these two functional areas were almost forced to adopt their own applications in response to the failing legacy system. Had that occurred, Cisco's IS would have been largely fragmented, causing a lag in business productivity (Nolan). The new enterprise system collects and updates information across business units. Time and money will be saved by consolidating the data making it readily accessible to all.

The Finance Department has had a huge pill to swallow over the course of this entire project. Each time a system fails, there is a cost associated with the time lost. The older UNIX-based system became a financial burden on Cisco. The idea of purchasing multiple applications was too costly without the guarantee of knowing whether the underlying issue would be fixed. Also, the looming $15 million dollar project presented huge risks in regards to the company's financial volatility during this time. The implementation of the ERP system had the potential to boost the overall performance of the company, or trigger its ultimate demise. The impact on Sales and Reporting could have been detrimental to the business as well.

Delayed correspondence or incomplete sales transactions due to a faulty system may have resulted in dissatisfied clients or loss of business (Chen). This group needs a reliable system to continuously generate and monitor sales. Lastly, the Technology department has been greatly affected by this massive project. Initially, this team was inundated with requests from

multiple departments to modify the applications on Cisco's legacy system. Now their expertise is needed to effectively implement a brand new ERP system. This has required many of the IT specialists to discontinue any work pertaining to the old system in order to focus solely on the implementation project. Implementation Effectiveness

Once the ERP system is put into place, the evaluation of its effectiveness in resolving the issues presented in the previous section must occur. First, the program was able to circumvent the possibility of departmental fragmentation. Connecting a data warehouse to the ERP system created a solid inter-connectivity among the key departments at Cisco. Secondly, the cost of the project was eventually offset by the huge returns the company received after resolving its own internal issues.

In the long run, Cisco will save money if it continues the use multi-functional IS programs. Third, the ERP system created an infrastructure that was easier to manage and understand. The IT department is now able to focus on one system instead of trying to maintain multiple application packages. Overall, the implementation of the Oracle ERP program was highly effective. Cisco accomplished its goal to complete this project in a short amount of time. Conclusion

Cisco was able to successfully execute a plunge installation of a $15 million ERP system in only nine months. Because Cisco's management team had a clear understanding of its immediate business needs, they were able to devise a well-planned framework to address each problem that it faced. Cisco's ability to stay aligned with its core values was the driving force

behind the success of the ERP implementation project. This company strives to function in operational excellence by investing in innovation, anticipating tomorrow's needs, and by partnering with the most qualified experts in the field. All of those actions were reflected during this nine month period through the careful selections of the right vendor (Oracle), the best company partner (KPMG), and highly skilled team members.

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