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Cisco Systems, Inc.: Implementing ERP

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TABLE OF CONTENTS

1. INTRODUCTION

Cisco is implementing Oracle's Enterprise Resource Planning (ERP) software. The case discusses the diverse, success factor, and difficulty Cisco face during its implementation. Cisco is in need to replace it system due to its drastically prospect growth and the failing legacy systems.

ERP system implementation had cost Cisco $15 million USD and the implementation had been completed in nine months. For that Cisco had allocated over 200,000 USD for rewarding the ERP team.

2. CASE BACKGROUND

2.1 SALIENT FACTS ABOUT THE CASE

Cisco Systems, Inc. was founded by two Stanford computer scientists in 1984 and became publicly traded in 1990. The company's primary product is the "router," the combination of hardware and software that acts as a traffic cop on the complex TCP/IP1 networks that make up the Internet (as well as corporate "Intranets"). With the rise of Internet technologies, demand for Cisco's products boomed and the company soon began to dominate its markets. By 1997, its first year on the Fortune 500, Cisco ranked among the top five companies in return on revenues and return on assets. Only two other companies, Intel and Microsoft, have ever matched this feat. Perhaps even more impressive, on July 17, 1998, just 14 years after being founded, Cisco's market capitalization passed the $100 billion mark (15-times 1997 sales). Some industry pundits predicted that Cisco would be the third dominant company—joining Microsoft and Intel—to shape the digital revolution.

Pete Solvik made a very good decision to upgrade the existing information system by implementing ERP when the company encountered a major shutdown for two days. One reason the project became successful was because of internal recruiting. The team consisted of the best business people. The company just did not rely on IT department, instead IT and business people worked together to meet the core objectives. The estimated costs and time to complete to the project matched closely with the initial estimation which is a key attribute of a project.

Another competitive advantage Cisco had was the purchase of an unusual contract. Both Oracle and other hardware vendors agreed to contracts for long-term functionality of the software and hardware. Because of the promised capability, the vendors bared the costs of fixing the equipment. This action resulted in a decrease in total project expenditure.

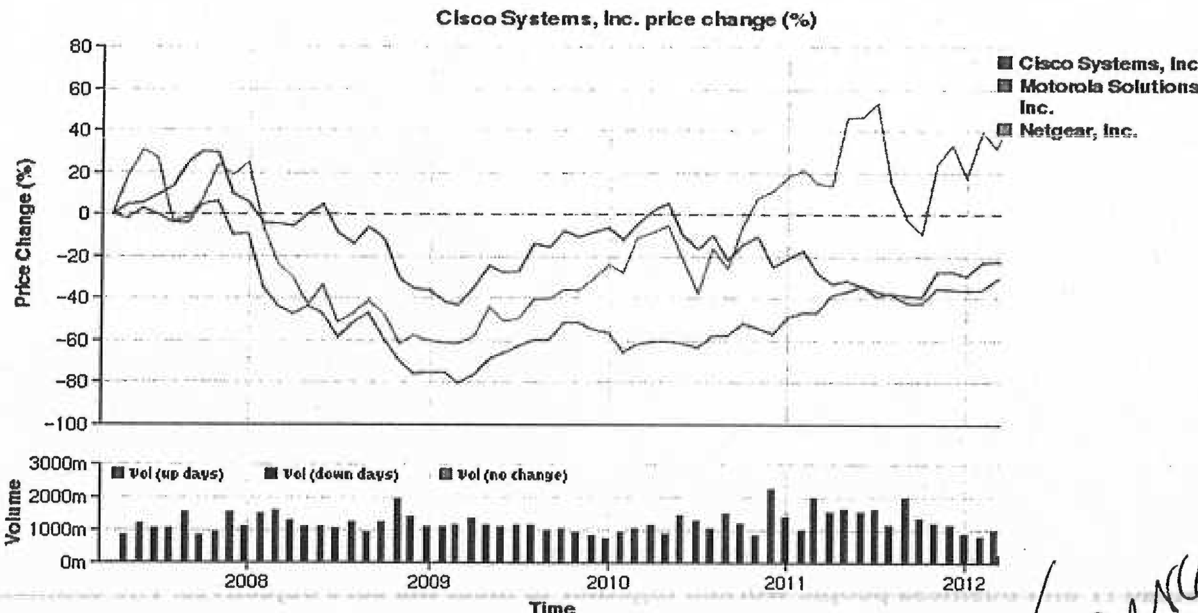
Cisco went through many issues during their implementation of ERP through three phases of CRP; which is not inherently unusual when a company goes through the testing phase. However, the company encountered major challenges when the new system lacked the capacity to process the required load and make modifications.

Being a Fortune 500 company, Cisco faces high level of competition. Since it is a leader in the industry, there is always a threat from mergers and acquisitions. Moreover, there is a threat from technology evolution and product substitution.

2.2 ECONOMY AND INDUSTRY

As of 28th of January 2012 Cisco has revenue of 44,844 million USD and a market cap of 106,641 million USD, with market share at 19.80 USD (NASDAQ). Cisco is under the telephone and telegraph apparatus (SIC 3661) and telephone apparatus manufacturing (NAICS 334210) based on mergentonline.com. Cisco has grown at a steadily rate.

However, when compared Cisco to its industry competitor like Motorola and Netgear, Cisco is satisfactory. However, Cisco when you considered is one of the most stable company in the industry as shown in the chart below. Though Cisco will have to improve their performance if they still want to be the leading company in it industry. As the trend of Netgear shown that they have improve significantly and it is possible for Netgear to become the next leading company in the industry.



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2.3 COMPANY ATTRIBUTES

2.3.1 BUSINESS STRATEGY

Provide Networks and Communication Solutions Strategic Objectives, and lead Cisco entry into key market. Cisco invests in strategic technologies and partners, and partner with business units which is a strategic advisor. Cisco also focuses on talent Management.

Cisco e-Marketing Strategy

Cisco has properly positioned itself to respond to market changes and--as shown above--is able to implement the latest tools and techniques to integrate their e-Business strategy with their standard line-of-business applications. The hardware and software solutions they employ are designed to provide cost-effective computing power, and can handle both horizontal and vertical growth without having to immediately change the applications or learn new technologies. Their infrastructure utilizes standard networking

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protocols, Web serving, and Web browsers. In addition, with a felicitously designed e-presence, Cisco is able to integrate comprehensive tools that allow for a quick response to new demands from their customers, and to new ideas as they emerge in the marketplace.

Business Plan

Assemble a broad product line so Cisco can serve as one-stop shopping for business networks. Systematize acquisitions standards for networking. Set industry wide software standards for networking. Pick the right strategic partners.

Vision

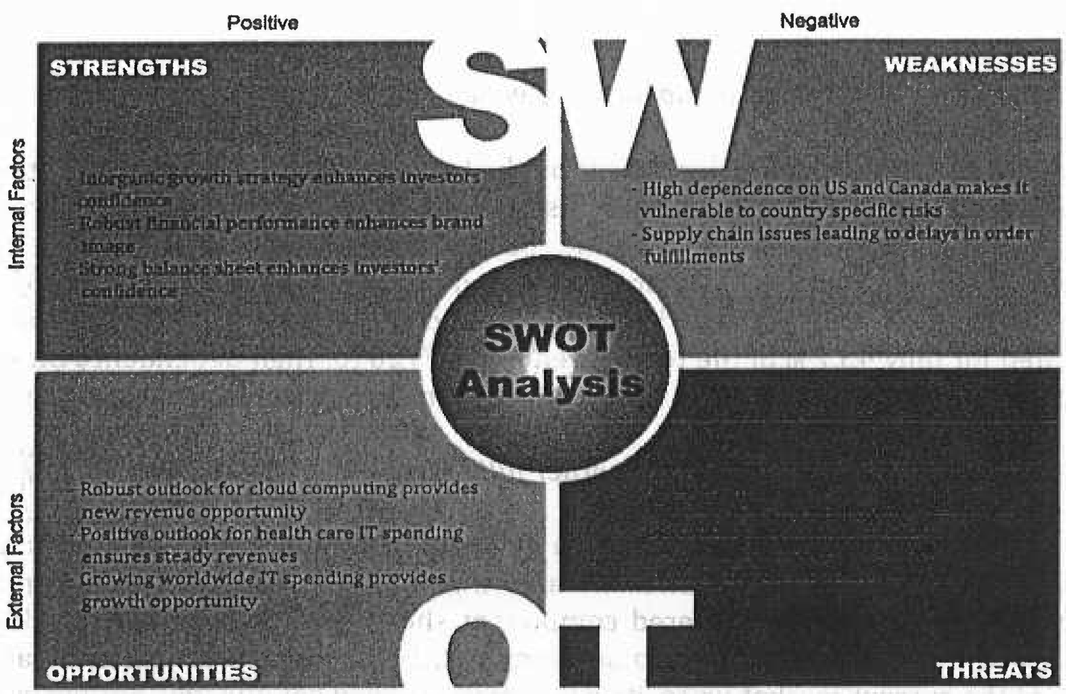
"Change the way world works, lives, plays and learns."

Sources?

Mission

"To shape the future of the Internet by creating unprecedented value and opportunity for its customers, employees, investors and ecosystem partners."

2.3.2 SWOT ANALYSIS



Sources?

Strengths

Inorganic growth strategy enhances investors' confidence

Meaning

The company has made important investments in attaining complementary companies, products, services and technologies. Cisco's achievement strategy strengthens its competitive position and provides scale to invest in innovation. Inorganic growth enhances the company's investors' confidence and ability to serve customers by pursuing cross-selling opportunities.

Robust financial performance enhances brand image

Cisco reported robust financial performance in the period 2006-10. In FY2010, the company recorded a 10.9% growth in revenues to $40,040 million from $36,117 million in 2009. The increase in revenues was primarily credited to a more balanced growth across all its geographic theaters, product categories and customer markets. In addition, strong financial performance paves the way for pursuing further inorganic growth strategies, and also improves the investors' confidence and enhances brand image.

Strong balance sheet enhances investors' confidence

Cisco's balance sheet features significant cash and cash equivalents, investments and balanced debt equity. At the end of FY2010, it reported cash and cash equivalents of $4,581 million, compared to $5,718 million in 2009 and $5,191 million in 2008. Robust balance sheet has also permitted the company to invest in inorganic growth initiatives, investment and buy back of own shares. The company's robust balance sheet enhances its investors' confidence as well as allows it to invest in the future growth avenues.

Weaknesses

High dependence on US and Canada makes it vulnerable to country specific risks

The company is highly dependent on the US and Canada for majority of its revenues. The US and Canada operations have historically accounted for a large portion of the company's total revenues, contributing 53.6% and 53.7% for the 2009 and 2008, respectively. The company has presence in many regions outside the US, including European markets, emerging markets, Asia Pacific and Japan. But these regions mutually accounted for only 45.7% of the total revenues in FY2010. High dependence on the US and Canada makes Cisco vulnerable to country specific risks and limits growth opportunities.

Supply chain issues leading to delays in order fulfillments

Cisco is expressively dependent on its suppliers and contract producers for certain components. Due to its outsourced manufacturing strategy, Cisco has limited control on the delivery schedules and has suffered component shortages due to manufacturing process issues. In the event that Cisco becomes committed to purchase components at prices in excess of the current market price, its gross margins may get affected. Supply chain issues may lead to delay in order fulfillment, affecting the revenues and margins of the company.

Opportunities

Robust outlook for cloud computing provides new revenue opportunity

Cisco has presence in the cloud infrastructure market. The company's procurement of the privately held company, NewScale, in April 2011, enhances its foothold in the emerging cloud market. NewScale is a leading provider of software that delivers a service catalog and self-service portal for IT organizations to select and quickly deploy cloud services within their businesses. The robust outlook of the cloud computing market will provide incremental revenues and increasing customer base to the company.

Positive outlook for healthcare IT spending ensures steady revenues

Cisco has a strong existence in the healthcare sector. In this market, the company offers connected imaging solutions, care-at-a-distance solutions, clinical workflow solutions, healthcare technology foundations, smart healthcare facility solutions, connected health, experience healthcare innovations, healthcare association affiliations and healthcare solutions related to electronic health records (EHRs). Moreover, Cisco's medical-grade network, medical data exchange solution and healthcare advisory services provide the capabilities needed to attain all three stages of meaningful use of EHRs as defined by the ARRA stimulus program. Positive outlook for health care IT spending will ensure steady revenues for the company's healthcare practice in coming years.

Growing worldwide IT spending provides growth opportunity

The worldwide IT spending is estimated to grow in the near future. A steady enhancement in the macroeconomic environment in 2010 will enable modest growth in overall IT spending. The IT spending growth in emerging economies is leading the way and driving the overall growth of the global IT industry. Cisco being one of the leading Internet protocol (IP) based networking and other products providers in the world is poised to capitalize on the positive outlook.

Threats

Intense competition may affect market shares and margins

Cisco faces intense competition in the networking and communications equipment markets, as well as in the cohesive computing solutions market. Cisco competes with many vendors in each product category. The company also faces competition from customers to which it licenses or supplies technology and suppliers. Since the inherent nature of networking requires interoperability, therefore the company must cooperate and at the same time compete with many companies. Intense competition may affect operating results, financial condition and market shares of the company in the coming years.

Exchange rate fluctuations may weaken its operations and financial condition

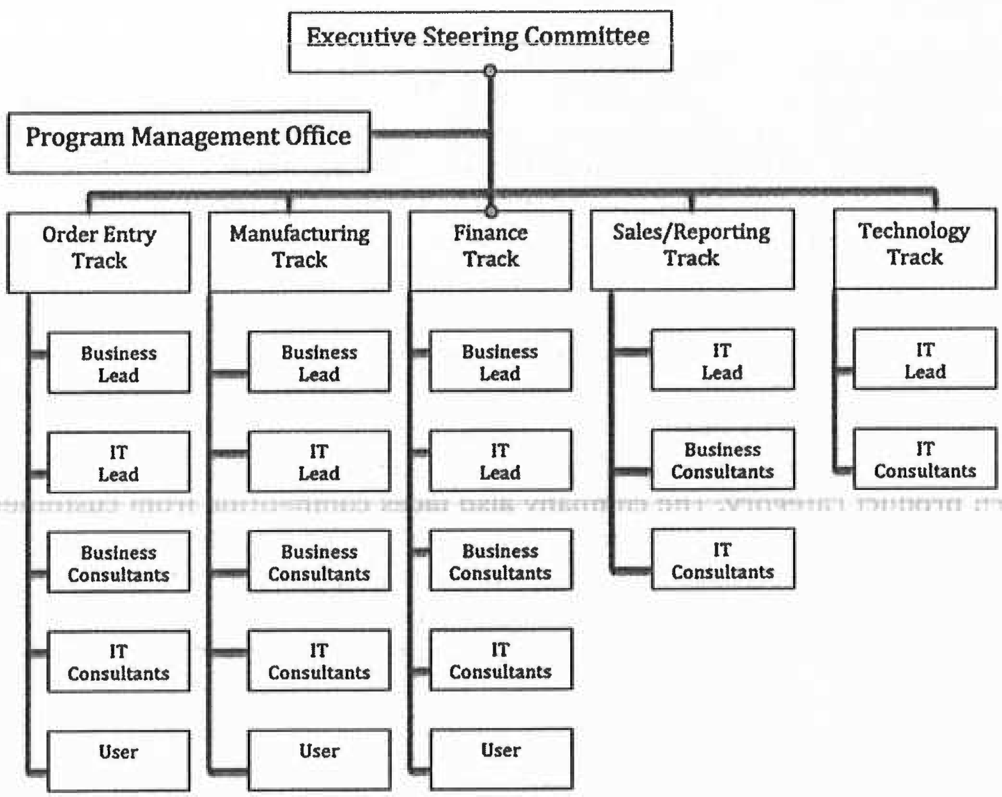
The company is vulnerable to exchange rate fluctuations as it conducts business globally in numerous currencies. Cisco has experience to emerging market currencies, which can have extreme currency volatility. Additionally, an increase in the value of the dollar may increase the real cost of its products to customers in the markets outside the US. Consequently, exchange rate fluctuations from time to time may significantly weaken the company's results of operations and financial condition.

Technological changes pose a risk of inventory obsolescence

The company's operating effects depend on its ability to develop and introduce new products into existing and emerging markets and to reduce the production costs of existing products. If the company collapses to develop new products that supply to the changing needs of the industry, most of the company's strategic enterprises and investments may be of no or limited value. Moreover, the success of new products depends on several factors, including proper new product definition, component costs, timely completion and introduction of these products, differentiation of new products from competitors, and market acceptance of these products.

2.3.3 ORGANIZATIONAL STRUCTURE

John Morgridge was appointed CEO in 1988. He thought the firms in Silicon Valley decentralized too quickly and subsequently lost control. He maintained a centralized organization. Only product marketing and research and development were decentralized. Finance, human resources, manufacturing, IT, customer support, etc. were centralized.



2.3.4 CULTURE

Cisco uses varied print media. Their choices include targeting trade publications, business, financial publications, and several national newspapers & magazines. For each type of publication, the message is tailored for their target. In financial publications, they stress bottom line, while in trade publications the advanced nature of their products along with the reasoning that they are best. Television and radio are the least used due to the overly broad audience that they reach. Cisco has advertised during major sporting events, just to enhance their general awareness to who and what they are.

The product line of Cisco Systems is vast but all related to connectivity. Cisco provides the broadest line of solutions for transporting data, voice, and video within buildings, across campuses, or around the world. There are 20 product categories, with several hundred hardware and software solutions. Additional products include training and product certification programs. An excellent equipment guide at Cisco- Quick Reference Guide gives a complete overview and full product information on all hardware and software solutions.

Product price is determined on a competitive and quantity based scheme. Economies of scale are always a factor in any equipment purchase. From the web page purchases can be made several ways each with a different pricing scheme, individual or corporate direct purchase from Cisco with proper credit approval, individual or corporate direct purchase authorized reseller, or authorized reseller purchase. Additionally Cisco has intergraded into their website links to finance purchases.

2.3.5 IT ARCHITECTURE

Cisco is currently using Oracle 11i, which provides a new and friendlier interface for the users. The system allows client to access application using web browsers. However, if the clients want to access the application in the data center then the client must install client software on their desktop.

SAN's Storage requirement has also increase radically. With the Oracle 11i, Cisco is enabling to redirect traffic automatically and dynamically. With that more servers can also be installed without replacing the existing system. Cisco currently has 2 disasters recover locations one in San Jose, California and another in North Carolina.

3. PROBLEMS AND KEY ISSUES

There are two main problems Cisco faced with during the implementation of ERP system. First problem is the hardware architecture and sizing. This problem occurred because Cisco purchased the equipment based on a promised capability rather than a specific configuration needed for the Cisco environment.

Second problem is the ability of the software itself to handle the transaction volume required in Cisco environment. This is because during the testing process Cisco test the data individually and only partially loaded database was used.

The other reasons that those problems occurred are that their motivation factors was based on the current failing legacy system and because of that the implementation was based on a timing constraint. This cause the ERP team to panic and had to express the implementation process. For example, they did the request for proposal in ten days, or deciding the software in just two days. Furthermore, the ERP team did not have a cost-benefit analysis and no formal business care.

Therefore, making the overall business performance decrease due to the unstable ERP system.

DETAILED ANSWERS TO THE CASE

What accounted for the success of this project?

The success was that ERP implementation was Cisco top priority and the buy-in from executives, also due to the strong vendors commitment. There are osme major reasons maybe accounted for its success: The company was a startup company and it can change its strategy quickly. Also the company had enough funds to support their project. Thirdly, workers there were very happy to work for the project and the incentive system also encourage employees. Fourthly, this project was supported by the top management 100%, that's contributed most to the success. Moreover, they choose Oracle as their partner which help them a lot because Oracle has a good manufacturing capabilities. On the other hand, their choice of KPMG as the integration partner also helped a lot. Why? How?

What were the most important things that Cisco managers did right?

There are several important things that Cisco managers did right:

1. The major decision is to implement the ERP project when Cisco legacy environment was not able to support the operations. But they still running this project.
2. The managers choose the best employees for the project and to make sure there is no inefficient manpower.
3. The manager also choose a good partner for their operation. They finally choose KPMG as their integration partners.
4. KPMG sent the previous director of an IT Company as the program manager to help in the ERP project. His abundant experiences help the success of Cisco a lot.
5. They also choose a good vendor for the implementation. They choose Oracle who had a better manufacturing capability than the other vendor. expertise & experience, willing to modify SW
6. The managers were very enthusiastic to present their idea to the Board of Directors to get final approval. They dutifully dedicated to their job.

What did they do wrong?

They set their timelines in nine months for implementing an ERP project is not very realistic. The managers do not test enough before finally going live. what else?

How did they manage unanticipated problems?

They cooperated together and everyone gave their full play to the professional knowledge. Use their brilliant brain and keep cool to solve the problem. And reported their problem to the Board of Director to get their support. How did they handle the sizing problem

Was Cisco smart or lucky with its ERP implementation?

During its ERP implementation, Cisco was both smart and lucky. The reason for their smart is the manager made a wise decision to implement the ERP project and choose good partner, like Oracle and KPMG. They weighted their options and make a comprehensive comparison. Also all Cisco's staff supported this project and tried their best to run this project. Cisco was lucky because they meet this ERP project, there is a chance gave to them to implement the ERP and Cisco owned many outstanding employees. These are its natural advantages.

Lucky → contract with Oracle was by performance capability & oracle handle the hdw issues

4. CASE ANALYSIS: ALTERNATIVE SOLUTIONS

Hardware architecture and sizing solution is to purchase the hardware based on specific configuration that is needed to satisfy Cisco day-to-day transaction.

Pros: - No need to purchase additional software

Cons: - Software may cost more

Ability of the software solution is to test the software with a bigger size database than its day-to-day database. This will make sure that Cisco day-to-day transaction won't cause any problem.

Pros: - Ensure that the day-to-day transaction is stable
- Reduce 60 days of trying to stabilize the system

Cons: - Take longer to test the system
- Might over implemented the system configuration, costing more than it need to

5. MANAGEMENT RECOMMENDATIONS

Recommendation made by the management to fix the ERP system was putting it as the top priority and agenda for everyone in the company. During the 60-days Cisco were in a complete SWAT-team mode, with the additional help from the hardware vendor by bringing in 30 more people to help fix the problem. Also commitment from Oracle and KPMG eventually help solve the problem and improve the performance.

6. CONCLUSION

The leading company, Cisco, must develop an effective ERP system to maintain the growth of its business, not to fall behind the competitors. By using the SWOT analysis Cisco can identify its position in the market and can also set up its strategy to choose the right ERP system that fit its needs.

Cisco should test the ERP system before adopting it. So that it will progress the right system that can fulfill its goals and also handle the problem it faces effectively. Due to the customers' inconstant requirement, unstable ERP system will definitely decline its performance. As a consequence, Cisco apply prototyping approach which call Conference Room Pilot that handling the training and configuration of the Oracle software; detailing documentation; and analyzing each functional area and developing the centralize data warehouse and final testing with full user load.

In conclusion, Cisco business relies on ERP system. If Cisco had not found the solutions for its ERP system, it would not have been able to stay in its industry in the long run.

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