

Knowledge Management and E-Learning at Cisco Systems

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Prof. Annalee Saxenian, Dean School Of Information

Management & Systems, UC Berkeley

Presented by:

Ijaz Qureshi

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Brief History of Cisco Systems

The Founders of Cisco Systems

Cisco Systems was given birth by two Stanford University graduates name Sandra Lerner from Stanford Business School and Leonard Bosak from Computer Science Department. Leonard and Sandra wanted to send emails to each other but their departments were using the different networks. So, Len and Sandy impassioned and determined invented a router by connecting cables and agile software.ⁱ Initially they funded the business by borrowing from their credit cards.

The Company Name and Logo

Sandra decided to call their business “cisco Systemsⁱⁱ”. She took the tail of San Francisco (cisco) and designed the logo by herself looking at the Golden Gate Bridge. For the first few years they were using the company name as “cisco Systems”. However, the external factions and people within the company started using the Cisco Systems, so they decided to change the name as Cisco with capital C).

Main Office

The first office was started from the living room at 199 Oak Grove Ave, Atherton. Most of the engineers were coming to this place to help Sandy and Len to develop new codes for the routers. In just few months the living room business spread to bed rooms and in fact there was no place left in the home. So, the Cisco Systems moved to its own office at 1360 Willow Road, Menlo Park in 1986ⁱⁱⁱ.

Sequoia Systems (Venture Capital Firm)

Business of Cisco Systems was growing and to continue the growth they decided to get money from Venture Capital firms. They were not able to convince 75 VC firms, finally Don Valentine of Sequoia Systems agreed to invest 2.5 millions for a 32 percent share of the company. Len and Sandy signed the agreement without consulting the lawyers that would give them the 30 percent stocks of the company. However, in return the VC firm would be responsible to provide financing, recruit management and sales staff and take care of the operations. Len become the chief scientist and Sandra VP customer services.

Departure and Arrival of Executives

Since Len and Sandy had signed the agreement with Don Valentine to recruit the management and sales staff, Valentine slowly started exercising his right. All of the people hired by the Sandy and Len were removed by the people Valentine could trust more. Anyhow, Valentine hired John Morgridge as president and he always sided with Valentine instead of founders. At the end things started going wrong and Sandy was asked to leave the company in 1990 and Len left the company later.

Organizations, Information Technology and Knowledge Management

Knowledge Management and learning has always been in the organizational structure and employees always benefited from the learning within the organization. The Knowledge Management is a new concept to benefit from the incredible amount of information that flows in the business. Those organizations who handle the knowledge effectively and efficiently, maintain their continuous growth and leadership in the industry. Richard McDermott in his article “Why Information Technology Inspired but Cannot Deliver Knowledge Management^{iv}” mentioned the “British Petroleum’s ability to leverage knowledge is key to its competitive strategy.”

Also in another very convincing article “What’s Your Strategy For Managing Knowledge by Hansen, Nohria and Tierney mentioned that Information Technology has made it possible to use the available information very cheaply to extremely benefit of it, that was not possible before.”^v

Probably the idea presented by Hansen, Nohria and Tierney has been implemented in Cisco Systems new technology that is used at the Call Centers to capture all the information, store it in a way that it can be used effectively to trouble shoot or to solve the problems in the relevant departments at the later stages in the business.

The big users of knowledge management are the consulting firms where knowledge is the biggest asset in the business. The stored knowledge is reused that helps to cut the cost and transferred the savings to the clients. However, the stored knowledge has not been use as effectively and as efficiently in many high tech firms including HP (an interview with SIMS student Megan Finn. Megan mentioned, “although the knowledge management department

existed in the HP culture, but it was not used by the employees for knowledge seeking purposes”). I guess it is because of the four key challenges in building communities (technical challenge, social challenge, management challenge and personal challenge) mentioned by Richard McDermott in his article “Why Information Technology Inspired but Cannot Deliver Knowledge Management”^{vi}

Having said this all and debating that knowledge management is something very important, I would move ahead to organizational learning. Communities of practice and human interaction are more important than the information stored on the machine. By nature as a human being we tend to learn more and quickly from each other in person to person or in social networks.

However, it would be worth mentioning what is written by John Seely and Paul Duguid in his article “Balancing Act: How to capture knowledge without killing it” “knowledge management focuses effectiveness more than efficiency”. Author said, “The reason that knowledge management is not about efficiency because it is all about change and change is not a very quick process”.

How Cisco Systems Shares Knowledge

Learning and Strategy Group at Cisco Systems

This group performs all of the learning tasks with the help of media department. Cisco Systems has 10,000 academies in 152 countries with 4, 21,000 students learning to be network specialists^{vii}. Knowledge is shared in these academies in person to person or in social networks. Also, online wealth of resources is there to help those interested in enhancing their learning in addition to class/group secessions in the academies.

Cisco Systems has 300,000 channel partners around the globe. It offers 400 video conferences on demand, 50 live broad cast per month most of these broad casts are executive briefings, and 2000 video conference secessions per month. Cisco Systems saves 133 million a year in training cost by using video and web based e-learning.^{viii}

All of these electronic knowledge sharing is for Cisco Partners and for those who have interest in the organization. Anyone with a computer connected to the internet can have all the privileges to online conferences, products updates and broad casts around the globe.

Within Cisco Systems (each department like product development, knowledge is shared in the person to person and organizational social networks). However, employees approach those who are close and then to the extended friends within the organization to solve the problems or to accomplish the goal.

Corporate Development Group at Cisco Systems

This group is responsible for all the acquisitions within Cisco Systems. Cisco's strategy is to acquire those companies that would enable Cisco's growth in the long run. Also, Cisco prefers to acquire the companies in the Silicon Valley but acquisitions have been out side the Silicon

Valley too. Overseas, Cisco works as partners with different organizations overseas, and Cisco do not acquire any organization overseas.

This is the John Chamber's policy to keep inventing before the competitors to avoid the layoffs in the organization. Also, John Chamber being from Virginia and John Morgridge from Milwaukee, Wisconsin both has strong family values of Midwest style. They prefer to keep the families close as it helps to increase the productivity.

Call Centers at Cisco Systems for Knowledge Management

Forrester Research mentioned in his study that 54 percent of the customers who wanted to speak to an employee would cost the company 33 dollar per inquiry, the same inquiry when sent by email would cost the company 10 dollars and a self service at the web site would cost only 1.17 dollar.^{ix}

Cisco Systems uses knowledge management technology for its global support organization that has enabled the growth in the virtual contact centers. It integrates with the company's call center—80% of Cisco customer self-service inquiries are resolved online, resulting in cost savings of \$500 million and a 25% increase in customer satisfaction.^x

Barton Goldenberg is president of ISM wrote in the IQ Magazine issue of March/April 2001

“The technology focuses on expressing, storing, sharing, refining, and retaining knowledge. Moreover, it allows for multiple querying and reasoning methods. Knowledge management technology progressively narrows a user's search to an answer that exists within a knowledgebase.”

The knowledgebase allows the continued growth of a virtual contact center. It should be accessible via multiple channels, such as Web chat, e-mail, phone, fax, and surface mail. One of the key benefits of a centralized knowledgebase is the ability to hold continuous dialogues with

customers regardless of their communication channel or geographical location. If implemented correctly, a knowledgebase gives every agent or customer access to the same up-to-date information.”

The Future of Knowledge Management

Two elements that will affect the near-term future of virtual contact centers are the emergence of multilingual centers and new analytical tools. These tools let create reports for identifying, for example, which customers are contacting when and about what issues, allowing learning from customer-service incidents and better adapting to customers' needs. Customers enjoy getting fast, accurate answers. Systems that do this help build customer satisfaction and customer loyalty.”^{xi}

Conclusion

Knowledge Management is a process to manage the knowledge so that organization as a whole can benefit of it. It is not an overnight process that can prove results in the short term.

Knowledge Management and E-Learning is a cultural change and change is not always welcome by every single person working in the organization. However, if this cultural change is implemented effectively then it would add an incredible value as we have seen in the case of Cisco Systems, Ernest & Young, Bains, and other consulting firms.

References

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