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Cisco Systems (B): Maintaining an Edge in E-Business

As of March 2001, Cisco Systems enjoys a reputation as the most sophisticated e-business in the world. As a rule, if anything can be "webified" at Cisco, it is. Cisco's image as the leading e-business is a critical driver of its sales success. The company's ability to demonstrate cutting-edge e-business practices provides a compelling argument for CEOs weighing the tough decision to make multi-million-dollar IT infrastructure investments.

While the company has been extraordinarily innovative to date, Cisco is far from complacent about being able to maintain its leadership position with respect to e-business practices. Amir Hartman, co-author of Net Ready, describes the angst:

"What was innovative yesterday, in many cases becomes the standard way of doing business tomorrow. You've got software packages and applications out there in the market that have 90-plus percent of the functionality of the stuff that we custom built for our own company. So…how do we maintain and/or stretch our leadership position vis-à-vis e-business?"

For Hartman and other Cisco executives, wrestling with the question of how to maintain this leadership position leads to a set of very tough issues:

1. How much should Cisco invest in generating and implementing new e-business practices? What should the funding mechanism be?
2. What is the best organizational model to ensure continued innovation?
3. What should Cisco measure in order to judge the success of its innovative efforts? Can these measures be tied to incentive systems for employees?

Given Cisco's success at generating new e-business initiatives so far, any change from the status quo will certainly be resisted by many Cisco employees. This case describes Cisco's current method for driving innovation, offers some analysis of this system, and describes some possible options for the future.

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The case is based primarily on interviews with Doug Allred, SVP of Customer Advocacy, Cisco Systems, in January 2001, and Amir Hartman, managing director, Internet Business Systems Group, Cisco Systems, in December 2000, although several other executives were also interviewed. It can be used effectively with "Cisco Systems (A), Evolution to E-Business."

Innovation at Cisco

Visit Cisco and you will hear many employees claim that "Cisco is a multi-billion-dollar startup." With more than 30,000 employees, and new hires coming in at a rate of approximately 3,000 per *quarter* (as of summer 2000), Cisco is perhaps too big to be calling itself a startup. Nevertheless, it clings to many of the values commonly espoused by startups, especially a pronounced disdain for bureaucratic politics—i.e., worrying about who gets the credit, who gets blamed, positioning on the org chart, perks, titles, etc. Cisco embraces change, values creative confrontation, promotes an environment in which ideas can freely be "thrown out on the table," and builds a spirit of teamwork built upon trust. An ethos of risk-taking, initiative, and responsibility is fostered, and speed is valued over coordination, efficiency, or perfection.

Until 1993, Cisco funded new e-business initiatives in a manner similar to what is in place at many corporations today. Funding came through the IT department, which was a cost center that accrued as administrative overhead (G&A). The department was funded at 0.75 percent of Cisco's revenues.

In 1993 Cisco took steps to align the objectives of the IT department with the strategic goals of the company as a whole. The existing funding mechanism meant that e-business initiatives were all evaluated on the basis of cost reduction, often overlooking impacts on sales, customer satisfaction, or employee retention.

In a rather unusual move, Cisco created a system that decentralized IT investments. This new "Client Funded Model (CFM)" gave each business-unit manager the authority to make whatever expenditures were sensible to increase sales and customer satisfaction. In addition, the organizational structure was changed so that IT reported to a new group called Customer Advocacy.

It is important to recognize that Cisco did *not* become one of the most sophisticated e-businesses in the world by setting this as a goal and charting a course to reach it. Rather, the company set up an incentive system that focused on customer satisfaction and held managers accountable. Doug Allred, SVP of Customer Advocacy, and one of the architects of the decentralized IT funding mechanism initiated in 1993, believes the key to maintaining an edge in e-business is a relentless focus on the customer.

> "When I think about taking the next step, I recognize that every past step that has worked arose from close customer intimacy…from being really well connected to key customers and understanding what they are trying to do, and then addressing their needs in the form of what we would now call e-business functionality."

According to Allred, where initiatives have failed, they have failed from being too introverted, focusing too much on speed and efficiency at the expense of focusing on the customer.

This system of decentralized IT funding combined with an emphasis on customer intimacy remains in place today. As the organization now provides a range of customizable products to an impressive variety of customer segments worldwide, the innovation process within Cisco has become somewhat chaotic.

There is hardly a shortage of initiative; new ideas spring up everywhere. This could be due to a strong entrepreneurial culture and a compensation system that spreads more than 40 percent of stock options beyond the management ranks. Perhaps it's just that that Cisco's employees are passionate about staying on the leading edge of technology. Opportunities to work on innovative e-business projects are coveted and are a welcome and motivating break for technologists, who otherwise might be frustrated with the day-to-day work on older systems or older technologies.

While some of the initiatives come from a combination of inspiration, creativity, and study of the latest technology trends, Cisco's strong customer-centric culture is paramount. Business-unit managers are aggressive about seeking customer feedback through a variety of mechanisms and use this feedback process to generate new e-business initiatives.

Within the business units, there is little clear guidance about what percentage of the staff should be devoted to innovative projects. Decisions are made instinctively, influenced by the risk-taking culture, but constrained by immediate needs to serve customers, and the ability to attract quality hires rapidly. Hartman notes,

> "Cisco is a company that is very focused on execution, short delivery cycles, making its numbers, putting out fires. So management tends to be very short-term focused. How does one continue to do that but at the same time seed, catalyze, grow, and integrate new value-creating breakthrough e-business ideas?"

As it stands, once heads of business units have decided *how much* effort should be allocated to pursuing new initiatives, they tend to delegate to senior technologists the decisions on *which* of the multitude of possible projects should be pursued. Projects tend to be approached incrementally—assigning a handful of people (5–10), waiting to see what is learned, possibly going to a trial with a leading-edge customer, possibly investing a little more, etc. There are very few huge, several-hundred-person efforts at Cisco; when they exist, it is usually to address a specific and immediate point of pain. (That was the situation in the early to mid-1990s when Cisco developed the Cisco Connection Online [CCO] to address unacceptable levels customer service.)

There is no definitive philosophy on when to "pull the plug" on projects that are not clearly paying off, but since projects typically are only funded for a few months at a time, this decision is revisited frequently. Managerial instincts on this decision are influenced by culture plus the need to keep employees motivated, consistency with the overall company strategy, and the "smell," if any, of a big breakthrough. Perhaps the compensation structure, which is based on three metrics —revenue growth, earnings growth, and customer satisfaction—also shapes managerial decisions on investing in innovative new e-business functionality.

A Current Innovation at Cisco

Cisco's efforts in the area of standardized B2B commerce platforms illustrate the company's innovation process. In the past, Cisco has automated the purchasing process for its largest customers by writing custom software that integrates the customer's purchasing systems with Cisco's order management systems. To extend this functionality to far more customers, Cisco, in conjunction with an industry consortium known as RosettaNet, is developing protocols and platforms that will simplify this process and obviate the need for (painful, brute-force) custom solutions.

The initiative bubbled up from the customer service staff, which focuses specifically on large enterprises. This group involved a customer advisory group and the IT organization to get sufficient traction to move the initiative forward. The IT group helped populate the RosettaNet consortium with Cisco employees. Naturally, the initiative affects several other parts of the organization, particularly the manufacturing and finance systems. As a result, the customer service staff will need to sell the initiative internally. The common goal of improving customer satisfaction will likely be central to their sales approach, as compensation incentives for managers throughout the organization are tied to customer satisfaction. If the initiative proceeds in a typical Cisco fashion, the IT department will assume responsibility for surfacing any inter-departmental conflicts as the system is implemented.

Brief Analysis of the Current System

While the decentralized system, combined with an emphasis on staying close to the customer, has been incredibly successful for Cisco so far, it is not perfect. First, as the company grows, it becomes more complex. Much of the organization is affected when new initiatives are introduced. A major challenge is simply staying connected—keeping employees throughout the organization cognizant of current initiatives and the ramifications of those initiatives. In addition, it is common for different business units to pursue initiatives that are substantially the same. As mentioned above, conflicts or duplications are frequently resolved by the IT department as various initiatives are actually implemented on Cisco's website.

There are also questions about the types of initiatives generated under the decentralized system. Because they are often influenced by customer feedback, they tend to be of the incremental, short-term variety. It is not clear how much effort is devoted to creating true breakthrough initiatives, nor is it clear what the appropriate level of effort should be. In fact, given Cisco's competence in identifying, acquiring, and integrating small companies with innovative technologies and talented employees, it is not clear that it is even necessary to pursue breakthrough opportunities in house. (Part of this competence also involves listening to the customer; the idea to acquire Crescendo, Cisco's entry point into the LAN switching market, came directly from customer feedback.)

Allred is somewhat dismissive of the possibility that you can actually be *too* close to the customer ("That is a problem I would love to have.") and seems to view the potential problem as more theoretical than practical:

> "I guess that one could argue that if IBM were selling mainframes to a bunch of people who had a mainframe orientation and they never talked to anyone else, then maybe they would never understand that client-server or peer-to-peer computing was going to be important. I understand that, but in my mind it is not really a problem."

A final issue is that initiatives generated within business units tend to be narrow in scope. It is not clear to what extent "white space" opportunities are being overlooked. Developing projects across business units requires extra initiative plus the involvement of senior executives to establish initial connections and guide the collaboration. As the company grows, this becomes less likely. Moreover, it is becoming clear that there are opportunities to co-develop, co-design, and co-engineer new e-business processes with external organizations, including clients and partners, but it is not clear exactly how to approach these possibilities or how to make them routine.

Possible Options for the Future

Clearly, the alternative to the current decentralized system is some sort of centralized organization that focuses on innovation. But there are any number of ways in which the charter of this new organization could be configured. What specific activities would it be responsible for? Who would staff it? How would it be funded? How would it be evaluated? Can it be configured in such a way that efficiencies and elusive "white space" opportunities are captured without destroying the innovative spirit at Cisco or its decentralized (Internet-like?) culture? Losing either could outweigh any benefits of centralization.

At a conceptual level, Cisco executives are tossing around at least three possibilities:

1. A Technology Research and Training Team (centralized "think-tank" that studies emerging technologies and keeps business managers informed of what will soon be possible)

2. A "Venture Engineering Team" (centralized technology research and implementation team)

3. An Internal Venture Capital Group (centralized technology business analysis and funding team)

However, the specifics have not been nailed down.

Case Questions

1. What do you think of the way Cisco funds new e-business initiatives?

2. Do you think Cisco should centralize any aspect of the innovation process? Which of the three possibilities above seems most appropriate (or can you suggest a different one)? Why? How would you define the specific charter of the new organization?

3. Can Cisco measure its innovative efforts? Tie compensation to these efforts? If so, how?