

TAKE A LOOK AT CISCO

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In 2001 Cisco Systems was a decentralized company organized around three lines of business (LOBs). Each LOB focused on a customer segment like Service Providers (AT&T, Verizon, Comcast, etc.), Enterprises (large multinationals) and Commercial (small and medium sized companies). Each LOB produced a line of products that were customized for the needs of their segment. And each one generated enormous growth during the dotcom bonanza. Of course, all that growth came to an abrupt end in 2001. In the first quarter of 2001, Cisco announced its first loss (\$2.69 billion) and a layoff of 18% of the workforce. So far, the story sounds like that of any other company. But Cisco used the crisis to transform the company.

In August of 2001, Cisco announced the first of a sequence of organizational changes that continue to this day. They centralized the functions from each of the LOBs. So now reporting to the CEO were the heads of Manufacturing, Engineering (called Development), Marketing, Customer Service and Sales, rather than the Presidents of the three LOBs. Then in order to maintain a focus on the customer, they created three cross-functional business councils. Each council was responsible for one of the customer segments: Service Providers, Enterprise and Commercial. A functional head chaired each council. The heads wore two hats. They led both a function and a business council. The structure was a type of matrix organization called the “Two Hat Model” (for more information, see my book, “Designing Matrix Organizations that Actually Work,” Jossey-Bass, 2008).

The centralized functional structure was needed to create a cost basis that was appropriate for the downturn. Functional organizations drop costs in two ways. First, when all the engineers are consolidated into specialist groups, like Video, the company minimizes the number of engineers they need to execute a given volume of business. The groups are pools of talent, which are then shared across the product lines. For example, under the old LOB organization, each LOB may have a need for two-thirds of a video engineer. The result would be that Cisco hires three engineers, one for each LOB. Under a centralized concept, the video engineering group would hire just two video

engineers and share them across the three product lines. A similar argument can be made for each function. It can be said that, in general, functional organizations require fewer people to do a given volume of work.

The other way that functional organizations take out costs is by reducing duplication and standardizing product and process designs. Under the previous LOB structure at Cisco, each customer segment designed and produced its own product lines. Even though they were each selling the same products, routers, switches, storage, etc., they managed to create three different versions of just about everything. When revenue is growing and margins are high, the redundancy is a small price to pay. But when revenue drops and margins shrink, the duplication is a big opportunity for cost reduction. The duplication was reduced at Cisco by centralizing all of the engineers and combining them into common product and technology groups. The central product groups created one version for a router, for a switch and so on. This standardization achieves economies in having just one design instead of three. Manufacturing gets volume in producing one high volume product rather than three low volume products. And Procurement can get volume discounts on fewer but common components. Logistics can now reduce total inventories with one large stock, rather than three smaller stocks. Similar savings can be achieved in the other functions as the number of transactions and processes are reduced. In addition, the centralized engineering function standardizes the interfaces between products so that they all will work together at the customer’s sites.

In summary, Cisco responded to the downturn by reorganizing in to a centralized functional structure. The change was appropriate because functional organizations are the champions of efficiency and low cost. They minimize the number of people to do a given amount of work. They reduce duplication through standardizing around a single best way. And they promote a low cost mindset. The Cisco cost structure clearly benefited from the reorganization. But Cisco also made sure that they did not forget about the customer and standardize too much.

Cisco added cross-function business councils for each of their customer segments. This structure was to counterbalance the biases of the functional structure. The functional organization, indeed any type of organization, if left in place, will overemphasize what it does best. In about five years, Cisco’s functional structure, if left alone, would have implemented too much standardization and too much cost reduction. If nothing were done, silos would have grown up separating the functions. Any cross-functional activity would have become impeded. What most companies do to overcome these structural biases is to oscillate between centralization and decentralization. For example, if Cisco had followed this route, it would have changed from a decentralized LOB structure in 2001 to a centralized

functional structure as I described. Then in order to avoid too much standardization, Cisco would have changed back to a decentralized LOB structure in about 2005. However, with the arrival of the current downturn, Cisco would likely have had to reorganize again in 2009 to lower its costs and eliminate duplication. In this way, many companies achieve a balance over time between standardizing and cost reduction, and customizing and customer satisfaction. But oscillation between structures at the top of the company is very disruptive. Every few years people worry about their jobs, lobby for their preferred structure, and become internally focused. Restructurings waste a lot of energy, result in winners and losers, and talent leaves the company. Fortunately, Cisco did not follow this common route of oscillating between structures. Instead they simultaneously organized around customer segments and functions.

The cross-functional councils championed the customer segments. The same people who had positions of power and authority in the functional structure staffed the councils. So when the engineers proposed standardizing a product, the sales people who were calling on the customer segments had a forum where they could contest the engineers. Not all product differences are duplications. Some are necessary differences required by customers. For example, regulators of the telecommunications companies require that the telecoms in California buy equipment that can survive a magnitude 6.0 earthquake. Small businesses neither need nor want this level of quality. So there are times when sales or marketing needs to push back on the engineers and debate whether the product standard is a good idea or not. Herein lies the difficulty of executing a simultaneous or matrix structure. Most top management teams cannot productively manage the natural tensions, pushbacks and conflicts that emanate from groups championing standardization versus customization.

Here is how it is supposed to work. When a new product development team proposes a new next generation product, all of the customer segment councils need to approve its design. Of course, initially they do not. One or two councils will want a customized design for their segment. The functions will respond by saying that we cannot afford three different designs. We will save money with a standard design. And besides, the segment differences are not that substantial and can be easily satisfied with a good, single standard design. The segments will then counter with the claims that the functions do not understand their customers. If they did, the functions would see how different each segment is. Each segment has too many different requirements that cannot be satisfied with a single standard design. At this point in many companies, the parties polarize, dig in their heels and argue about who is right and who is wrong.

The successful companies are those that create a culture of collaboration like Cisco has done. Cisco sees the polarization as something to be avoided. The functions can acknowledge the fact that, yes, each segment is different. But they can add that each segment is not 100% different. There are many things that are the same or can easily be made the same. The product development team then standardizes on those features that are the same but customizes only those features that must be different. Products are then designed from the very beginning to be easily customized for different segments and for different countries. The company then develops a capability of mass customization. In other words, Cisco's structure of functions and customer segment councils, along with a collaborative problem solving culture, allow them to achieve both standardization and customization. This is the way the structure is supposed to work.

Cisco, as mentioned above, has chosen the collaboration path. How did they accomplish this transformation? As usual, it started with the CEO. He saw collaboration as necessary to make the new organization work. He then made the effort to change his own behavior from a command-and-control style to a collaborative style. His direct reports were part of the Operating Committee into which the councils reported. The Operating Committee began to operate on collaborative principles. The direct reports were then evaluated on their ability to collaborate in the Operating Committee and in the councils. So the CEO implemented the transition at his level and continues to support the council system to this day.

The human resources systems have been redesigned to support collaborative behavior in the councils and throughout the organization. All members of the top leadership are now measured and rewarded for collaborative behavior. A peer rating system has been adopted and is now used in performance evaluations. The Cisco leadership model has been transformed to specifically emphasize collaboration. So today people are selected, developed and promoted on the basis of exhibiting a competence in working well with others. Those people who enjoy and are good at collaborating thrive and move up to positions of leadership. Those who do not, have moved on. Cisco states that about 20% of their leadership found the new culture difficult and have moved on.

Cisco has also created a common basis for the councils to do their work. They have definitions of what a council is and what it does. Every council produces a plan. In the plan are the Vision (V), the Strategy (S) and a ten-point plan for Execution (E). The whole system is referred to as the VSE. It provides a common language for council members. The ten-point plan links the councils into the functions, which have commitments to deliver to each council. The councils have common metrics, which allow revenue, costs and other accounting measures to be tallied by segment, by product, by function

and by country. This common infrastructure facilitates the workings of the councils and was the basis for making them transparent.

More recently, Cisco has been using its own product lines to support the collaborative process. They use their own video networks to support their video conferencing product lines. They are their own best customer. Now they are not just selling networking solutions, but providing consulting to their customers. Cisco's consulting is based on their own experience of transforming to a collaborative business. Cisco and its CEO see themselves as a model of the management of the future.

Cisco's structure has evolved along with its culture and infrastructure. They have increased the number of councils over the years to about twelve. One key addition was the Business Process Operation Council (BPOC). There are three ways to reduce a company's cost structure. Two are achieved through the functional structure. As described above, functional organizations can achieve efficient staffing and eliminate non-essential duplication. But if left alone, functions can create additional costs for other functions along the company's business processes. That is, every company has a new product development process, an order fulfillment process, a requisition to settlement procurement process and so on. All of these processes are cross-functional processes. Therefore, in order to decrease the company's costs, a cross-functional council that focuses on these processes is necessary. The BPOC at Cisco focuses on streamlining these processes and reducing duplication at the functional interfaces. So the combination of the functional organization and the BPOC allows Cisco to lower and manage its cost structure.

When growth returned to the markets, Cisco did not reorganize back into decentralized businesses. Instead they added councils for their new growth market segments. In addition to the Service Providers, Enterprise and Commercial councils, they added councils for Emerging Markets, Small business and Consumer. As a result, Cisco has grown from \$18.9 billion in the flat years of 2002 and 2003, to \$39.5 billion in 2008.

Then when the world economy fell off of a cliff in September 2008, Cisco did not have to reorganize back to a functional structure. They already had one. Instead they put a little more emphasis on the functions. These functions become more vigilant about staffing. Cisco has made some minor headcount adjustments in engineering, but no massive layoffs. They made a few investments in reducing duplication and added a few more projects to the BPOC. With its matrix organization, Cisco is ambidextrous. It can manage costs and it can manage growth. Today it tilts to the cost side. If and when growth returns in 2010, they will tilt to the growth side. Cisco seems to have mastered how to manage both the downturns and the upturns.