by Zeus Kerravala, Enterprise Computing & Networking Vice President, zkerravala@yankeegroup.com, 617-880-0235

Is Cisco Worth the Premium?

Decision Point:	Maximizing Network Investment to Scale to Business Needs and Adapt to IP Communications
The Bottom Line:	There are many reasons Cisco Systems commands a premium for its network equipment—ranging from technology leadership to TCO.
Key Concepts:	Network, equipment
Who Should Read:	Enterprise: CTO, director of IT, VP of telecom, VP of operations, VP of networking
	Vendor: Chief marketing officer, VP of marketing, VP of business development, VP of sales, VP of product management, COO, CEO

Enterprises Need to Look at More than TCO

As enterprise customers look at upgrading their networks or greenfield opportunities for LAN switching and particularly fixed platforms, they often ask: Is Cisco equipment worth the premium?

The decision process typically is typically the same—they look at the total cost of ownership and then decide. Many vendors market the initial acquisition cost to their customers as the primary driver for a purchase decision. Unfortunately, once an enterprise deploys a product these same customers come to regret choosing the low-cost vendor because initial acquisition makes up roughly 20% the overall cost of running a network. With this focus on the acquisition, support, training, talent and support for future services and applications are neglected.

Question

Are customers currently willing to pay a premium for Cisco equipment?

Answer

Exhibit 1 shows that Cisco owns 55% of the LAN switching market by ports but a whopping 75% by revenue, indicating that most customers understand the value of Cisco goes beyond the initial acquisition price. Conversely, ProCurve by HP commands the second position by ports at 10% but only 3% of the overall revenue—demonstrating that price is the main factor in the decision to buy ProCurve equipment. So, clearly customers are willing to pay a premium for Cisco equipment. The remainder of this DecisionNote focuses on why customers are willing to do so.

Question

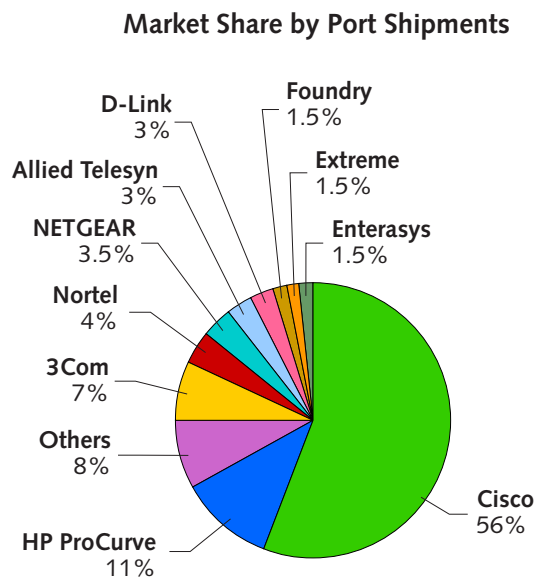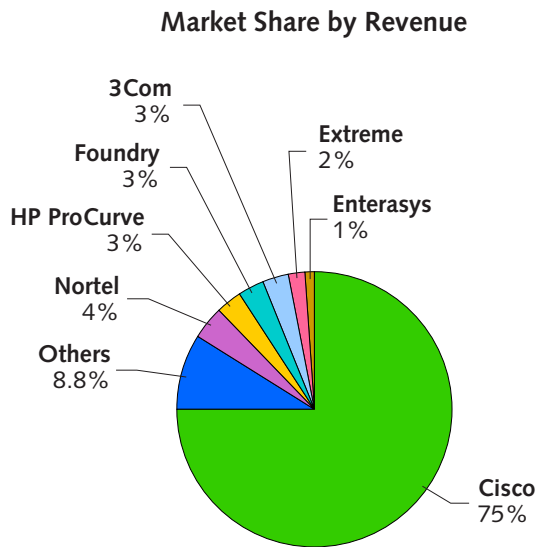Why are customers willing to pay the premium for Cisco?

Answer

The answer to this question is multifaceted and revolves around Cisco and its ecosystem of support and partners. There's more to a purchase decision than just price. Based on several primary interviews, these criteria are most important to enterprise decision-makers:

- **Corporate stability:** This area often swings a decision in Cisco's favor. The question in many buyers' minds is whether their network infrastructure supplier can continue to invest in their products and drive innovative solutions that can advance the customer's business. With Cisco's market share and enormous resources, there's no question it will continue to invest in LAN switching. Conversely, customers question HP's long-term commitment to ProCurve. Although it's true that ProCurve takes second place in market share, it's a distant number two and networking has never been core to the computing-focused HP.

- **The value of support:** All support isn't created equal and not all agreements are the same. Enterprises need to examine the details of the support system in an apples-to-apples comparison. Our primary interviews and survey data (see Exhibit 2) indicate that Cisco's Technical Assistance Center (TAC) was one of the bigger components of the decision criteria. When customers call in with a Priority 1 problem (the network is down) they expect to be directed immediately to a high-level engineer who is an expert in that specific problem rather than being placed in a hold queue for the next available agent. The other vendor that scored well in this area is Foundry Networks, which has adopted a similar model to Cisco's TAC. It's not surprising that Foundry also charges a premium for its high-end networking equipment. One customer we interviewed at a university recently traded in ProCurve equipment based on their support experience and the difficulty they had in locating an expert to talk to who could help them quickly identify and solve the network outage.

One surprise from the interviews was that the concept of next business day (NBD) replacement as a standard offering in the service plan was relatively unimportant to customers. In any environment where the network is considered mission-critical, the customers would keep their own spares kits for their network equipment.

**Exhibit 1.
Cisco Dominates Network Equipment Purchasing**

Market Share by Revenue

- 3Com 3%
- Foundry 3%
- HP ProCurve 3%
- Nortel 4%
- Others 8.8%
- Extreme 2%
- Enterasys 1%
- Cisco 75%

Market Share by Port Shipments

- D-Link 3%
- Allied Telesyn 3%
- NETGEAR 3.5%
- Nortel 4%
- 3Com 7%
- Others 8%
- HP ProCurve 11%
- Foundry 1.5%
- Extreme 1.5%
- Enterasys 1.5%
- Cisco 56%

Note: Totals do not equal 100% due to rounding.

Source: Yankee Group, 2006

- **The cost of acquiring and retaining personnel:**
One aspect of TCO that is difficult to quantify but did factor into the decision criteria is the cost of finding trained personnel. This is an area that any market leader has a distinct advantage. A search on Monster.com reveals that the number of trained individuals for Cisco equipment exceeds any other manufacturer by an order of magnitude. This is also true for Microsoft with operating systems or EMC for storage systems. One IT manager we spoke to stated that, in general, Cisco engineers need little to no training. Any needed training can be conducted at a number of local third-party facilities. The IT manager cited that training for some other manufacturers' products had to be done at only a few dedicated facilities scattered about the country. In addition, using products from market leaders is more appealing to most of the network or IT administrators because they feel it provides them a better career path as it makes their skills more portable from firm to firm.

    Lastly, one CIO we interviewed felt that using products from non-de-facto standard vendors created an aspect of employee lock-in because the cost of locating, hiring and training an individual is high—meaning the employee has more leverage in salary negotiation and can often command a salary 10% to 15% above market value.

Exhibit 2.
Technology Vendor Selection Criteria

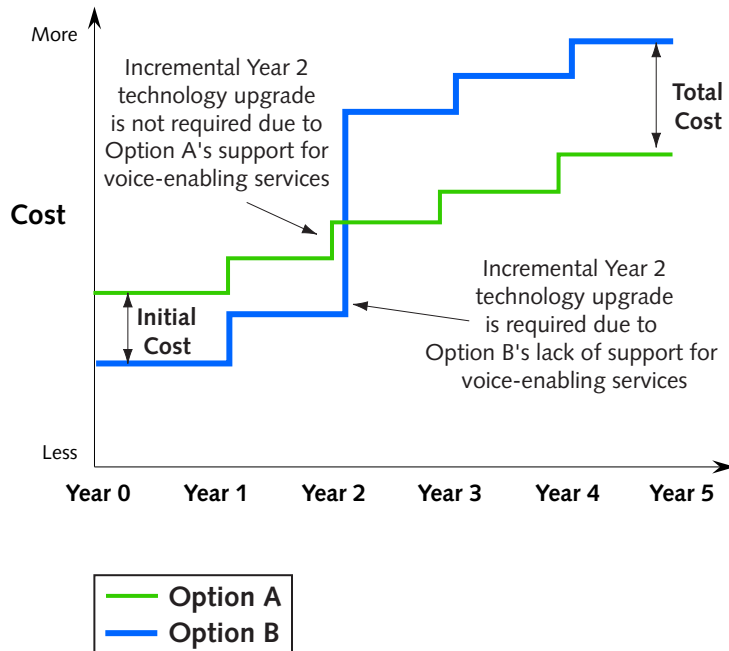| Selection Criteria	Weighted Average
Value for the money	4.01
Quality/reliability of products	3.99
Strength of service and support	3.97
Initial price of product	3.83
Financial stability	3.59
Technology vision/innovation	3.41
Market leadership	3.23
Product ease of use	3.10
Reference from VAR	2.91
Adherence to open standards	2.77
Relationship with salesperson	2.54
Reference from other customer	2.49

Note: Weighted average on a scale of 1-5 with 5 being the most extremely important and 1 being extremely unimportant

Source: Yankee Group, 2006

- **Use of merchant silicon vs. ASICs:** One school of thought in the current marketplace is that switches are becoming a commodity and should all be built with merchant silicon from vendors such as Broadcom and Marvell. Vendors such as Dell, D-Link, 3Com and ProCurve use merchant silicon, which has driven the purchase price of these products down. However, the use of merchant silicon creates an environment that can stifle innovation. Vendors can use merchant silicon to deliver standardized features to switches, but advanced features are better delivered through custom code and ASICs—often the "secret sauce" of leading-edge network vendors such as Cisco, Force10 and Foundry Networks.

    In addition, merchant silicon vendors rarely interact directly with end users so the network equipment vendors have a better understanding of what new features need to be delivered via the network. Additionally, when a vendor controls both the hardware and software, it can integrate features faster for support for new protocols and applications. Vendors can update ASICs for many years of innovation through software. This provides enterprise customers with significant long-term value. Many vendors that rely too heavily on merchant silicon have to churn their products quickly to deliver the new features embedded in the off-the-shelf silicon. One of the main counter arguments to custom software and silicon is that the requirements for fixed-port switches or low-end products are more basic so the coupling is not as critical. As more features move from the core to the wiring closet, requirements across the network are becoming more complex—increasing the importance of the coupling between the hardware and software. Customers' spending habits continue to demonstrate that switching is not a commodity and that there is room for innovation beyond what merchant silicon can deliver.

- **End-to-end value and feature integration:** As companies continue to deploy mission-critical applications on the network, organizations will need to view the underlying network foundation as an end-to-end business platform. If they're deployed correctly, networks can deliver fully converged services to all points in the enterprise. However, to realize the benefits of convergence, a company must deploy the proper network foundation technologies to ensure the network will scale easily, will adapt to changing business climates and can support integrated advanced technologies without business interruption.

  When evaluating network foundation technologies such as routing and switching, organizations should look out 5 years or more to calculate TCO. As Exhibit 3 shows, a product may appear to have a lower TCO early in the lifecycle. However, as companies need new services and perform incremental upgrades, the wrong choice can quickly lead to a skyrocketing TCO. In addition, the implications of choosing the wrong long-term products can lead to unnecessary downtime, lost opportunity costs and inconsistent device manageability. One CTO described Cisco switches as a Swiss Army Knife: He wasn't sure when he'd need the additional features, but he knew they'd be there when he needed them.

Exhibit 3.
Future Cost Implications of Today's Decisions

Source: Yankee Group, 2006