ED PAULSON

INSIDE CISCO

THE REAL STORY OF
SUSTAINED M&A GROWTH

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E.P.

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INTRODUCTION

Cisco is a business giant and truly one of the most astounding success stories of modern times. This is a company with historical annual revenue and income growth rates of between 30 percent and 100 percent or more with annual revenues in the tens of billions of dollars. A large, established company, with one of the largest market capitalizations in the world, Cisco acts in many ways as though it is a start-up. The firm reinvents itself based on marketplace demands and technological advances while avoiding the stagnation and dogma that often accompany large size and huge success. Independent of the difficult times that Cisco and the entire networking industry are experiencing in 2000 to 2001, you have to give credit to Cisco for its past successes. I personally expect that Cisco will come out of these depressed economic times stronger, leaner, and more competitive than it was going in, which will make it an even more formidable adversary than before. And, whether that happens or not, understanding the key management ingredients that provided its historical success is valuable for any manager looking to grow a business in a dynamic marketplace.

A confluence of many factors contributed to Cisco's historical success, including the growth of the Internet, the influence of its leaders such as John Chambers and the original founders, the incredible Nasdaq run of the 1990s, and the technological advancements associated with networking technology. Another area that must be considered—and is viewed by many to be the most critical component of Cisco's outstanding historical performance—is a well-tuned acquisitions process. Cisco has acquired more than 70 companies since 1993, acquiring 26 companies in fiscal 2000 alone, and has constantly refined its acquisition process along the way. In fact, the company has been so successful with its acquisitions that the industry created a new term for Cisco's type of research and development (R&D) approach: acquisition and development (A&D).

Buying a company is easy. Making that purchased company succeed in the postpurchase environment is something else altogether. Just as anyone can get married, anyone can buy a company. But not everyone can make a marriage successful, and many companies wind up selling (divorcing themselves of) the very companies they initially enthusiastically acquired, often selling for a fraction of the original purchase price. Not only has Cisco acquired 70+ companies, but it has retained almost all of the acquired personnel while improving Cisco's revenues derived from the acquired firms' products and technologies—sometimes increasing the acquired company's revenue stream over 50 times in as little as 18 months. All of this was done while also maintaining the dignity of Cisco's and the acquired company's personnel. That kind of acquisition success warrants additional investigation and understanding. Understanding the management essence of that kind of acquisition success prompted my interest in writing this book.

Inside Cisco takes a detailed look at the very processes that make the Cisco acquisition engine work so well. It first analyzes the Cisco way of doing things and, when applicable, the rationale for doing it that way. It then presents the assumptions associated with the Cisco way of performing acquisitions along with an assessment of how applicable or portable the Cisco approach is to other companies and industries.

The intent of the book is to deliver the merger and acquisition (M&A) gospel according to Cisco—the company that has become the gold standard of M&A practices, both strategically and operationally. My hope is that readers will be simultaneously entertained and informed, gaining insight into Cisco's acquisition philosophy and practices, as well as how its process might be applied to the reader's company.

Let's face it: The vast majority of acquisitions fail to meet the expectations set by the buyer and seller at the time of the purchase. The shattered dreams, aspirations, financial goals, and personality conflicts arising from these failed acquisitions are the stuff of evening television dramas but nothing that any professional wants in his or her life. However, acquisitions have been, and continue to be, a powerful technique not only for growing a company but also for keeping it from stagnating as it grows. The constant infusion of talent, technology, products, and personnel that accompany a successful acquisition program keep the buyer vibrant as it grows into its future success.

Cisco has figured out a process that works. Its processes provide an excellent starting point for any business manager intending to use acquisition to its full advantage. Its track record sets the backdrop of success against which any other acquisition program can be compared. Every professional should be interested in using acquisitions as the potent strategic tool that they can be, and not the company-stalling nightmare they have often become. These professionals are well-served by first learning the practices of the best. And the best practices are those of Cisco Systems.

Inside Cisco starts out presenting some background information about Cisco Systems, its incredible financial and operational success history, an overview of the basic Cisco acquisition process, and an introduction to the key people who helped mold Cisco Systems into the company and culture that it is today—a culture, by the way, designed to acquire and assimilate other companies.

The middle chapters (4 through 9) present the minimum criteria that any Cisco acquisition candidate must meet even to get to the due diligence stage. In essence, these are Cisco's initial show stoppers. Readers will find this emphasis on intangibles intriguing in that Cisco places its heaviest emphasis on the technology, products, and employees of a target company. It considers financial analysis and pricing as a final stage of the process, after it has been determined that the rest of the company is a good fit. Back to the marriage analogy—it is silly to talk about a prenuptial agreement if the fact that one party wants kids and the other doesn't is enough to derail the marriage plans altogether. Work out the details that are of paramount importance with the belief that, for the right situation, the right financial arrangement can be made.

The next set of chapters (10 through 14) takes a detailed look at the mechanics of the Cisco process from target selection, to due diligence, to personnel, product, and manufacturing assimilation, along with the Cisco rationale for setting the purchase price.

The chapters close with a summary analysis of the feasibility of a growth-by-acquisition strategy (Chapter 15) and a somewhat objective assessment of the overall Cisco acquisition and development (A&D) approach to product line enhancement (Chapter 16). These chapters will make more sense to the readers after having read the preceding chapters.

Included in the appendixes is various pertinent information excerpted from my book, *The Technology M&A Guidebook* (John Wiley & Sons, 2001) such as a simple due diligence checklist, some general background information about company buyer types and their motivations for purchasing companies, and a listing of Cisco's acquisitions to date. Not all of the information presented in the background appendixes applies to Cisco directly, but it is included to provide a framework for understanding what is unique about the highly focused and refined approach that Cisco has cultivated.

Throughout the book you will find sidebars that refer to various aspects of Cisco Systems. When the comments are from someone who has worked for or currently works for Cisco Systems or one of its acquired companies, the sidebar is called "From Inside Cisco." If the comments are from a third party but related to Cisco, then the sidebar is called "About Cisco." General Silicon Valley background information or comments are presented in the "Inside the Valley" sidebars.

The information presented comes from any number of sources. My intention was to distill the superfluous facts from those critical to an understanding of the Cisco M&A methodology. Much of the information comes directly from my personal interviews with current Cisco executives, ex-Cisco executives, published interviews, and comments from colleagues within high technology in general or Silicon Valley in particular. It was amazing to me the number of people I know in Silicon Valley who have worked for, are working for, or are in some way attached to Cisco Systems. Cisco is a large company that casts a wide net within Silicon Valley, and it has directly touched the lives of tens of thousands of people. Their stories are presented here as well when applicable.

My sincere wish is that you find this book as enjoyable to read as I found it to write; that the Cisco A&D methodology presented makes an impression on you; and that you carry the presented information with you in a way that perhaps transforms an acquisition that you may become involved with from one of number-crunching and fiefdom conflicts into one of integration and exhilarating success. Being part of a growing business that is truly changing the way people live their lives converts work from something we do to make a living into something that we passionately pursue with a high level of motivation. Acquisitions, handled effectively, keep a company dynamic. Acquisitions, handled effectively, ward off the unfortunate stagnation that comes with success. Cisco knows acquisitions. Read this book and learn what Cisco knows. Learn how you can turn acquisitions into your powerful strategic weapon. Prosper and enjoy!

CHAPTER 1

SO WHAT'S THE BIG DEAL?

In this business, if you are acquiring technology, you are acquiring people. That is the reason large companies that have acquired technology companies have failed. If you look at AT&T and NCR, or IBM and ROLM, the acquirer did not understand that it was acquiring people and a culture. If you don't have a culture that quickly embraces the new acquisition, if you are not careful in the selection process, then the odds are high that your acquisition will fail.

—John Chambers, President and CEO, Cisco Systems

Within the networking and communications industry, Cisco Systems is the 800-pound gorilla to beat. This is not a new company although people sometimes think of it as such. On the contrary, this company has been around since 1984 when two Stanford University employees decided that this newfound networking technology they had just implemented for Stanford needed wider exposure. The company was initially based on highly technical, and mostly invisible, products called routers, which determine the directions in which Internet-based communication will be transmitted. Pretty esoteric stuff on which to build a multibillion-dollar business powerhouse, but Cisco did it.

The normal person on the street doesn't typically own a router, but because of Cisco they know that routers exist. Ask your neighbors, whether in technology or not, if they have ever heard of Cisco Systems and you will likely find that they own or have owned Cisco stock. Ask them what Cisco does, and they will say something like, "They are on the Internet and make routers." Dig any deeper and there won't typically be much more there, but they will still own the stock—although of late they will lament the amount of money they have lost. (By the way, I have tried this any number of times and the results are fairly consistent.) People tend to think of Cisco as "new" technology but treat it like an old standard like GE or IBM from an investment perspective. Some people love Cisco. Some people hate Cisco. But most people know of Cisco. That in itself is quite an accomplishment, particularly since the company had done practically no advertising up until very recent times. Other notable achievements attributed to the company and its performance are that because of Cisco:

- Many early owners of Cisco stock have made tremendous gains on their portfolio holdings and bettered their personal way of life.
- Several thousand Cisco employees go to work as millionaires.
- John Chambers, Cisco's president and chief executive officer (CEO) is asked to meet with the president of the United States and with leaders of foreign countries and to speak to some of the greatest minds in the world today.
- Over 70 companies that used to be stand-alone corporations have been taken into the Cisco family with acquired people staying on as Cisco employees, defying the industry turnover norms.

Cisco Systems has refined the use of acquisitions as a strategic business weapon. Where other companies acquire organizations with the ensuing results being stalled growth or further restructuring in a frantic attempt to make the acquisition profitable, Cisco increases the revenues of its acquired companies and fully integrates new employees into its culture. Cisco looks for acquisition target companies that can simultaneously address customer needs and increase Cisco's revenue. Cisco does not make it a practice to do acquisitions as a financial exercise—the company is too busy growing its markets and taking market share from others to bother with those types of financial shenanigans.

Perhaps Standard & Poor's (S&P) can say what I am trying to say more succinctly and with a higher level of objectivity, as stated in one of the S&P Industry Survey reports dealing with Computers: Networking.

> Cisco Systems continues to dominate the enterprise gear market. The company's well executed acquisition strategy has positioned the company as the largest and fastest growing among its peers. . . . In a business defined by continuing price declines, Cisco has been able to keep its gross margins above 60 percent—sharply higher than its competitors—aided by steady introductions of new products and implementation of cost cutting initiatives.[1]

By the way, this is said about a company that grew its revenues 56 percent from fiscal 1999 ($12.154 billion) to fiscal 2000 ($18.928 billion) while maintaining excellent (52 percent) net income growth as well.

Some people contend that Cisco is on a decline since its stock dropped precipitously in calendar years 2000 and 2001. Certainly the stock has dropped, like many others on the Nasdaq, but this does not mean that Cisco, the operational company, is in decline. It is incredi-

About Cisco

Given the kind of pressure they [Cisco] are under from the shareholder community, it's like they've done it backward and in high heels with the whole world watching.[2]

—Virginia Brooks, analyst with the Aberdeen Group, commenting on Cisco's ability to maintain a high state of readiness and focus bly cash rich and continues to maintain a solid cash position, while sustaining 40 percent revenue growth. Clearly this company is doing something right. This chapter presents background information providing a little more perspective on this incredible company's accomplishments.

ACQUIRE AND GROW

Cisco buys companies as an integral part of its operation. It doesn't buy companies because these companies sometimes appear on the radar screen. It does not buy companies because it feels that its financial muscle could be more efficiently used, gaining a higher return, if invested in the purchase of a company with no operational benefits. It buys a company because that purchase will expand Cisco's product offerings, enabling it to offer a wider array of products and services to its customers. Cisco intensely believes that if you do the things that are right for Cisco's customers, it will benefit Cisco. And, so far, its history bears this out as a solid approach.

There are a number of important contributors to the success of the Cisco acquisition strategy, not the least of which is the high-technology industry that Cisco shares with such industry leaders as Nortel Networks, 3Com, Lucent, and hundreds of other smaller players. Technology is not going away. Sure, the Nasdaq took a huge hit in the 2000 to 2001 time frame, but this does not mean that customers no longer need technology or the benefits derived from its use. There is a solid case to be made that technology in general and networking in particular will do nothing but increase in importance to both business and general public consumers. Cisco is positioned smack-dab in the middle of the Internetworking revolution that continues to expand our reach globally. The world is a little closer and smaller because of Cisco and its technology partners, and we, the consumers, will continue to find new ways of using this Internet-connected world.

And technology continues to evolve at a mind-boggling rate. Instead of quoting Moore's Law, again, let me simply use a term passed on to me by one of Cisco's engineering vice presidents: "perishable." Yes, technology is perishable. Just like that head of lettuce you bought last week at the store that is no longer edible, much of the technology purchased 12 to 18 months ago is no longer viable. It is too slow, or not compatible, or it is simply too much hassle to get and keep working. And why hassle with it when you can purchase a replacement part that is likely smaller, more reliable, less expensive, and faster than that clunker you are hanging on to? In short, technology is perishable, although with a shelf life a little longer than that of a head of lettuce.

My point here is that technology continually advances, and these advances are in demand by network users, most of whom are already Cisco's customers. Is Cisco always going to properly anticipate and design the right products for the right customers at the right price at the right time? Not likely, as evidenced by Cisco's lackluster performance in early 2001. That is simply not realistic. But can Cisco keep in touch with its customers, keep tabs on the start-up marketplace, and design a process by which that start-up's technology can be offered to customers when both the customers and the products are ready? Now, that is doable! And that is just how Cisco traditionally approaches its business, both strategically and operationally.

MONEY, INTERNET PROTOCOL, TIMING, LUCK, AND MORE MONEY

What makes a Cisco a Cisco? Or a Microsoft a Microsoft? Why can certain companies have these nearly meteoric rises while others remain flat or, even worse, disappear completely? Any successful entrepreneur who is being honest with you will let you in on a little secret: Planning is great, but add a little luck to it and you have a highly successful start-up. Luck is important in any venture, but there is also a good case for saying that we make our own luck as well.

FROM INSIDE CISCO

Certain things have happened that have been very lucky for Cisco along the way, but I think that in a lot of ways you create your own good luck. It was a unique combination of the right place, the right time, good management, and mistakes by the competitors.

—Barry Eggers, former Cisco executive and current Silicon Valley venture capitalist

Al Shugart, founder of a number of well-known start-ups such as Shugart Associates and Seagate, has a plan for success in Silicon Valley. He says that if you plan and are unlucky, you will likely survive but not explode; if you are lucky without planning, you might survive but your chances are slimmer. Don't plan and don't be lucky, and you are out of business; but plan and then be lucky, and the sky is the limit. Cisco appears to have fallen into this last category.

"First of all, they [Cisco] were in the right market at the right time," says Barry Eggers, former Cisco acquisitions leader and a general partner with Lightspeed Venture Partners, a venture capital firm in Menlo Park, California. "They were there at the beginning [of the Internetworking market] as were a couple of other players, like Proteon. They executed fast [and] took advantage of that market. . . . That market turned into a larger networking market that they were able to control. So part of it was right place, right time."

Okay. That is the luck part of it combined with the ability to have recognized the opportunity and quickly acted on it. But there was more to their success, according to Eggers.

"Part of it is in the execution along the way. They have had a lot of important people who have done a lot of great things. Terry

[Eger] is one of them. John Morgridge. John Chambers. A lot of people one layer down, even down to the individual engineer who has done a lot of key things to help Cisco along the way. They have been able to hire the best in the industry along the way [and] keep them around."

It's also useful if your competition helps you out by making blunders. That was the case with Cisco and several of its primary competitors according to Eggers.

"Another thing that has benefited Cisco is that some of its competitors made major mistakes along the way. A good example is the Wellfleet-Synoptics acquisition, a merger of equals that formed Bay Network. For a couple of months it created a company bigger than Cisco, but only for a couple of months. After that, Bay Networks ended up being a very minor player in the market." (See more on the dangers associated with a merger of equals in Chapter 9.)

I agree with Barry's assessment. There are a lot of talented people in Silicon Valley specifically and in high tech in general. Something was, and still is, special about Cisco that enabled it to outperform its competition, provide excellent working conditions for its employees, and provide high value to its customers while also providing excellent investment returns to its shareholders.

I contend that what differentiates Cisco from other companies is that it not only knows the way it wants to operate, it actually operates that way. In other words, Cisco walks the talk. From John Chambers on down to the lobby receptionist, Cisco is a company of people dedicated to providing excellence. Cisco is a highly motivated and competitive company that is determined to be the number one or two market share leader in every market space within which it competes. It is intent on maintaining a high degree of communication with its customers and being the first vendor to provide its customers with the solutions they are looking for.

Cisco is a company that not only sells Internet technology, it uses that technology for its own internal operation. (It eats its own dog food!) In fact, by some estimates Cisco has the most active electronic commerce site in the world, and encourages its customers to place orders for Cisco equipment over the Internet. Over 90 percent of all

Cisco orders are processed over the Internet. There is an internal intranet that connects all Cisco sites into one electronic village. Cisco has the goal of tying the entire world together using Internet technology. Now, how is that for a grand, world-class goal?

FROM INSIDE CISCO

The Industrial Revolution of 200 years ago divided society by creating a gap between "haves" and "have-nots." Today's Internet Revolution has the potential to unite everyone by combining the strength of the Internet and education, the two great equalizers in life. By applying what we've learned in business to all aspects of society, we have the power to use technology to create an Internet gateway that has the potential to positively change people's lives.

—From the Cisco Systems Fiscal 2000 Annual Report

IT'S ALL IN THE NUMBERS

Enough talk about high-level management perspective stuff. Let's take a look at some hard facts that reinforce, in a numeric way, my assertions. This section first looks at Cisco's financial history and then presents some summary information about its acquisitions at the time of this writing. It is important to remember that what Cisco did in the past worked. The company grew at alarming rates and treated its people and acquired company personnel with dignity and opportunity along the way to its success. Perhaps Cisco of 2001 and forward will not enjoy the financial or stock market success of the Cisco of past, but this does not negate the fact that what Cisco did back then worked. It worked for all of the right reasons, and those reasons were more than simply being in the right industry.

Remember that Cisco had plenty of competition back in the early 1990s, such as Cabletron, Synoptics, Wellfleet, Proteon, and others. Those companies have not fared nearly as well over the same years in the same marketplace as Cisco has fared. When a marketplace or an economy takes a drop, companies within those industries or economies also take a hit. That is, in large part, what happened to Cisco in the late 2000 time frame continuing into 2001. Cisco is, and continues to be, one of the best-run companies in the world, but it must also operate within the existing market conditions. A serious drop in orders within the networking marketplace is going to have a negative effect on all companies in the space, with those that are less efficiently run suffering the most serious, if not fatal, blows. Well-run companies will weather the downturn and may even come out the other side stronger than when they went in. This is a true test of the management of a company—surviving, and even thriving, through a serious downturn in the economy and/or a marketplace. It might have gotten caught believing some of its own public relations releases, but it is also taking substantial steps to reinvent itself within a difficult marketplace.

If anyone can excel in a given marketplace with a specific set of market conditions, good or bad, it is Cisco. Look to the past as an indicator of what has worked and why it worked. From this analysis, look for ways to apply this information to your own situation so that we can someday write a book about your company.

Cisco's Financial History

Cisco was founded in 1984 as a California corporation. It was a small company with only a handful of employees until the late 1980s. It received its first round of venture capital funding in 1987 from Sequoia, $2.5 million. Cisco had 10 employees at the time.

Cisco went public on February 16, 1990, with an initial public offering (IPO) of 271.2 million shares that went out at $18 and closed the day at $22.50. Since then, Cisco has split two for one seven times and three for two twice. A single share of Cisco stock purchased in 1990 and held until today would have split so that the shareholder now owns 288 shares of Cisco stock for each share purchased. And that single share of stock purchased at $20, for example, is now worth $5,000 (assuming a current stock price of at least $17 per share). Are you starting to see why investors who discovered Cisco early on are so happy with this company?

The company was long-term debt-free as of October 28, 2000, and had $6.391 billion in cash on hand. For those accountants among you, its current assets were $13.059 billion and its current liabilities $5.802 billion, providing a current ratio of 2.25. As mentioned earlier, it did this while increasing revenues by 56 percent from $12.154 billion in fiscal 1999 to $18.928 billion for fiscal 2000. Net income for the same period increased by 52 percent. Cisco does not now and never has paid a dividend to its shareholders. As of July 28, 2001, as reported at the Cisco web site, Cisco still had $4.9 billion in cash, $12.835 billion in current assets, and $8.096 billion in short-term liabilities, which still provides a current ratio of 1.58—not bad for a company experiencing a serious downturn.

Take a look at Table 1.1 for a summary of Cisco's financial performance since its IPO in 1990.

It can be seen from this table that Cisco has had some incredible financial and operational years since its IPO. Remember that it is one thing to grow a company at 30 to 50 percent when the company generates only a few hundred million dollars in revenue. It is something completely different to grow at those same rates when the company has a revenue level of tens of billions of dollars.

Growing at these rates while maintaining high profitability and low debt is a tricky business that Cisco has managed well. But it has also managed something else well that brings us to the topic of this book. Cisco has maintained its agility while becoming at one point the largest company in the world by market capitalization. Cisco has been able to maintain this nimble nature while still growing huge

Table 1.1 Summary of Cisco's Financial Performance since 1990 Initial Public Offering

Year	Stock Splits	Revenues	Revenue Percent Growth	Income	Income Percent Growth	Earnings per Share	Number of Employees
1990		$ 69,000,000			n/a	—	254
1991	2 for 1	$ 183,000,000	165%	$ 43,200,000	n/a	$0.01	506
1992	2 for 1	$ 340,000,000	86%	$ 84,400,000	95%	$0.02	882
1993	2 for 1	$ 649,000,000	91%	$ 172,000,000	104%	$0.04	1,451
1994	2 for 1	$ 1,243,000,000	92%	$ 314,900,000	83%	$0.07	2,262
1995		$ 1,979,000,000	59%	$ 479,200,000	52%	$0.10	3,479
1996	2 for 1	$ 4,096,000,000	107%	$ 913,300,000	91%	$0.15	8,259
1997	3 for 2	$ 6,440,000,000	57%	$1,414,000,000	55%	$0.23	10,728
1998	3 for 2	$ 8,459,000,000	31%	$1,872,700,000	32%	$0.29	14,623
1999	2 for 1	$12,154,000,000	44%	$2,567,000,000	37%	$0.38	20,657
2000	2 for 1	$18,928,000,000	56%	$3,914,000,000	52%	$0.53	34,617
2001		$22,293,000,000[1]	18%	$3,086,000,000[2]	–21%	$0.41[3]	30,000[4]

[1]As reported on Cisco web site, year end.
[2]Pro-forma reported results.
[3]Met Street estimates.
[4]An approximation based on several reports and notification of a reduction of approximately 6,000 regular employees as stated in the June 1, 2001, 10-Q filing.

from the influence and infusion of acquired companies, their products, technologies, and personnel.

M&A Buying Spree

Starting in 1993, with Cisco's purchase of Crescendo Communications, Inc., Cisco has pursued a series of acquisitions as a way of moving quickly into product areas that customers demanded and Cisco did not yet supply. Cisco contends that Silicon Valley is its research lab, and Cisco prefers to let the Valley entrepreneurs and the venture capitalists take the initial validation risks on any new technology. Once products are proven technologically and from a customer demand perspective, Cisco moves in and buys the company and its products. It then proceeds to assimilate completely the acquired products, technology, personnel, and customers into the Cisco culture and operational model. In short, the acquired typically completely disappears once purchased by Cisco.

Cisco's core belief is that great technology run through the Cisco sales and manufacturing operation will leverage the purchase to much higher revenue levels than the start-up could ever have done on its own. John Chambers regularly refers to the leverage that Cisco achieved with the Crescendo purchase as a validation of this process. Chambers claims that the $95 million paid for Crescendo, a company with around a $10 million revenue run rate, was justified in that Cisco's switching products sales, derived directly from the Crescendo purchase, grew to a $500 million revenue run rate within 18 months of the purchase. In essence, the Cisco operational model leveraged Crescendo's products to generate 50 times the revenue stream. Sounds like leverage to me.

FROM INSIDE CISCO

When something changes faster than we anticipated or we make some other mistake, then we adjust very quickly and don't spend a lot of time with the "not invented here" syndrome, trying to protect our decision of two years ago.

—John Chambers, Cisco president and CEO, commenting on the need to quickly move past and recover from mistakes

Cisco started out slowly with its acquisitions and eventually picked up steam so that in calendar year 2000 alone Cisco purchased 22 companies, for a grand total of 70 acquisitions finalized between 1993 and 2000. Total spent on the 70 purchases equals nearly $35 billion, with around 7,000 employees being acquired in the process. (See Appendix D for a chart detailing the important financial aspects of the acquisitions.)

By the way, it is difficult to find any sales information for most of the acquisitions since they were privately held companies before being purchased by Cisco. As a result, it is not possible to determine accurately the total amount of leverage gained from the acquisitions. Suffice to say that LightStream Corporation, acquired by Cisco in 1994 for $120 million, sold $1.5 million worth of products the year before the Cisco acquisition and is reported to have generated $45 million in Cisco sales revenue a year later. LightStream produced high-end asynchronous transfer mode (ATM) technology products and had 60 employees, which put it right into the Cisco sweet spot with respect to number of employees. Whether all of the Cisco acquisitions performed to this standard as to the sales leverage is difficult to ascertain precisely, but looking at Cisco's sales history it is clear that Cisco did something right.[3]

LightStream was doing well from a revenue perspective but was put on the road to obsolescence shortly thereafter by Cisco's purchase of StrataCom in 1996 for around $4.6 billion. There must have been strong motivation for making such a move, and there was, according to Chambers.

"We began to notice that wide area networking and local area networking were coming together more rapidly than we had thought. . . . [Customers] were telling us that while they liked our direction with LightStream and liked our next-generation product, we were not going to have the market share that they needed to feel comfortable with in the next 12 to 18 months. So, even though LightStream was on a tremendously successful run rate, we literally ate our own young and acquired StrataCom for $4.6 billion—getting a much bigger player in the ATM business—because the market changed quicker than we thought."[4]

Not all of Cisco's acquisitions have been a success—or "grand slam," as Chambers puts it. But those that have performed well within Cisco have generated large revenue gains and brought Cisco into new markets. Most importantly, the acquisitions kept Cisco in the running for customer business, which is Cisco's most important business objective.

In many ways, Cisco's acquisition and development (A&D) investment processes are a lot like a venture capital firm's. A venture firm does not expect each of its acquisitions to make it gobs of money, although it doesn't buy in expecting to lose. Out of a mix of companies, the firm expects that 40 percent to 60 percent will maintain their own and stay afloat. Another 20 percent to 40 percent will be dismal failures, and another 20 percent to 40 percent will be whopping successes. The ones that succeed will make all the rest of them worthwhile. Cisco operates in much the same way. It does not expect all of its acquisitions to be stellar, but those that are will contribute to Cisco's revenue stream in a huge way. Those that do not make it are not a total loss since the acquired people are now part of Cisco. And the others that maintain themselves are also wins in that the people are acquired and Cisco maintains a presence in those chosen markets. For Cisco, there is strategic value in this.

WHAT'S NEXT?

Chambers is regularly asked for his version of the successful company of the future. Here are some of his thoughts on this subject.

- The fast will beat the slow any day. Be first and work quickly to get a dominant market share in your chosen areas. "If you can't be fast, you're going to get left behind."
- Have intense customer focus. "Any company that does not have its finger on the customer will get left behind."
- Use a horizontal business model. "Horizontal companies will win. They always have in any industry."
- Use open standards. "It will be a single data-voice-video world underneath a packet-cell infrastructure."

- Create a company that attracts and maintains talent. "This is an area where a handful of really bright engineers will outproduce a thousand other engineers."
- Use the Internet technology within your own organization. "Otherwise, you can't get the profitability or productivity or the capability to move with the speed to take on the large competitors, or the capability to create the profits which will allow you to have the market cap which allows you to acquire."[5]

One of the more difficult issues facing Cisco as its revenues increase is finding new marketplaces that can sustain the types of revenue growth that are needed to fuel the Cisco 30+ percent annual revenue growth rate. A 30 percent growth rate for a $20 billion company requires that Cisco add $6 billion in annual revenue. There are not many markets that can sustain that type of growth, and if it is a mature market Cisco must take that revenue share from another already established vendor to meet those goals. That is a much more difficult process than selling new products into a hot new market that everyone agrees must be expanded. Time will tell if Cisco can compete in new markets. I fully expect that it will succeed, with success defined as maintaining profitability while acquiring market share. But, I also fully expect that given Cisco's size, the new markets it is entering, and the existence of a serious economic slowdown it may be that Cisco's future revenues will not grow at historical levels. Perhaps this is the reason for the sharp decrease in the stock price in late 2000 and early 2001.

Yet, Cisco will continue to add products to its price list, and the more advanced technology products will likely be acquired instead of developed in-house. This acquisition strategy has worked for Cisco in hot times and will continue to work for it in depressed marketplaces as well. In short, acquisition and development is a viable business expansion strategy that will surely be adopted by other companies as they begin to understand the business wisdom associated with the approach. As usual, Cisco got there first!

THE FINAL ANALYSIS

As you work your way through this book you will see that Chambers is continuously reshaping and molding the company to meet performance benchmarks. As usual with Chambers (and Cisco), if it sounds like a good idea for someone else, it is an equally good idea for Cisco and should be implemented. Cisco has every intention of continuing its acquisition and development product creation strategy into the future, although with a more targeted approach that concentrates on key market segments instead of a broader-brushed approach. This approach will likely not involve as many acquisitions per year, as indicated by the lack of a new acquisition in the entire first half of calendar 2001. In some ways, the depressed stock market may present buying opportunities for Cisco that would not be as readily available in a robust stock and IPO market. Remember that Cisco is cash-rich and has a stock that is currently priced at a much lower level than it has been within the past 24 months. A lower-priced stock has an easier time moving up in price, whereas the previous lofty stock price levels were more likely to come down instead of increase.

The Internet and its related technologies will survive because it has a viable, useful purpose for its users. The Internet is bigger than Cisco but Cisco is in large part synonymous with the Internet, and if the Internet survives so will Cisco. If the Internet has some unforeseen problem that makes it less viable from a business perspective, then Cisco will likely move on to the next opportunity emerging from its customers and will continue to acquire those companies needed to fuel that success. It may stumble as part of that transition, but Cisco will survive. The recovery process may not always be pretty and its actions may not always seem reasonable to the general public, but Cisco has a legacy of survival and adaptation in an industry that treats adaptation as a requirement. Paranoia is a common thread within Cisco, and that paranoia sets Cisco enough on edge to keep it from falling an unrecoverable distance when it stumbles.

CHAPTER 2

BUYING THE CISCO WAY

If you buy a company with customers, product flows, and entrenched enterprise resource systems, you have to move very gingerly. Otherwise, you risk customer dissatisfaction. Figuring out how to integrate this type of company could take nine months.[1]

—Mike Volpi, Senior Vice President, Cisco Systems

The incredible growth experienced in the networking industry has manifest amazing successes for some companies and dismal failures for others. John Chambers refers to the current networking phenomenon as the "fourth evolution of computers." The first was mainframes, dominated by IBM; the second was minicomputers, which had a number of major players with none being clearly dominant; and the third was personal computers and local area networks (LANs) driven by Intel and Microsoft.[2] There is a solid case to be made for this assertion. The end user's need for computers has driven the proliferation of user workstations. Early users connected directly to a mainframe that existed on their local site. Today, users do not exist at a single location as was initially seen with the mainframe computer. The more mobile users became, the greater the need was for networked communication from outside of the company site, requiring the extension of the LAN to a more wide-area-networked (WAN) approach. The Internet with its standards and business-political neu-