

EXPERTS' CORNER

Special Feature

Cisco General Counsel on State of Technology in the Law

Speech Given by: Mark Chandler

Today I hope to offer some thoughts on the effect that changes in technology will have on the practice of law.

I offer you three questions for our discussion today:

- First, how is technology driving change in knowledge-based industries?
- Second, what are the key areas of vulnerability in the legal services business to these technological changes?
- And third, what will it take to succeed in this changed environment?

Now as you can imagine, I have my own ideas on these questions. I don't pretend to be unbiased. Where you sit does affect where you stand. You may profoundly disagree with my conclusions about these three questions. But they are questions that need to be grappled with by anyone who is in the business of providing legal services.

Once again, how is technology driving change in knowledge-based industries? What are the key areas of vulnerability in the legal services business to these technological changes? And finally, what will it take to succeed in this changed environment?

Let me tell you a bit about my company and why these questions are so interesting to me. Cisco sells products which connect people, from home networking products, like the iPhone, to the core routing and switching systems used by the world's largest telecom

companies. We do so at an annual run rate of \$32.8B, which would place us at about number 60 in the 2006 Fortune 500. Our operating expenses are about 35% of revenue and falling. We bring about a quarter of our revenue to the bottom line, before interest and taxes. Nothing that would make a large law firm envious, but we're proud of it. We have \$19.5B in cash, generate over \$2B of cash flow from operations each quarter, and have bought back \$37B of our company's stock in the last 5 years. We have about 51,000 employees working in 80 countries.

I offer these data points from the perspective of a general counsel who is required to run his department just as other corporate departments are run. This is more and more the case in American industry. The legal department in Cisco is as metrics-driven as manufacturing, HR or sales. I've got 4.7 employees in my department per billion of revenue, total legal spend is about .38 percent of company revenue, and non litigation spend about .16 percent. I spend \$38M internally, and about \$80 million per year with outside counsel. I know just where I stand on these metrics vs. my peers, because we share the data. My numbers are pretty good, but I still don't know how to be as efficient as Larry Tu at Dell.

The bottom line is that I'm driven by the same need for productivity improvements as is the rest of the company. It's simple. As Cisco gets bigger, the share of revenue devoted to legal expense needs to get smaller. Letters from law firms telling me how much billing rates are going up next year are therefore totally irrelevant to me, or as we say in Silicon Valley, orthogonal to my concerns. Think about it: not one of the CIOs of your firms expects to get a letter from Cisco explaining how much more our products will cost next year. And not one of our suppliers comes to us to tell us how

much their prices will go up next year. So from my perspective, I don't care what billing rates are. I care about productivity and outputs.

Turning then to the first of the three questions, how is technology driving change in knowledge-based industries?

My core message is that access to information is being simplified. The price of information is being driven toward its marginal cost of production. Traditional command and control organizations – think the record labels – find themselves outmaneuvered by small decentralized organizations who know how to build networks – think of Kazaa.

How many people here have read Tom Friedman's *The World is Flat*? Friedman is right. Easier access to information is revolutionizing the global economy. I was at a community lecture a couple of years ago by Michael Spence, who won the 2001 Nobel in Economics. He said the networking of computers as the most important development in economic history since the opening of trade routes from Europe to Asia in the late Middle Ages. The reason: because where work gets done, and how it gets done, is being radically altered. The great human network that we have created is having a profound impact around the planet.

People who thought they had a corner on information find that's no longer the case. I was talking with a friend recently who is a senior technology officer at a large high tech company. She is from India and was describing a problem a friend of hers in India was having -- the friend's son wanted very much to go to one of the IITs, or India Institute of Technology campuses. They were so oversubscribed, with the emergence of 300 million middle-class Indians seeking advancement, that he was rejected. The parents were complaining that because of that, their son was forced to go to Cornell. Now

everyone I tell that story to laughs at first. But there's a moral there – the corner on information, on knowledge, on the transmission of knowledge, that we think we have in this country, that we think we have in this profession, just isn't there any more.

What's happened in the recording industry provides a great example. Tower Records' liquidation is the end of an era. iTunes and Kazaa, represent the beginning of a new one. Recording industry revenues are down 25% in the last five years. The ability for any centralized organization to dictate how information will be packaged and delivered is going to zero, as individuals take control of how information and knowledge is generated and offered.

With Trip Advisor and ePinions, what is the role of Fodor's and Frommer's? With Wikipedia, what is the role of Britannica? With Amazon and reader reviews and blogs, what is the role of the bookstore? Did you know that the membership in the American Booksellers' Association has declined from over 4,000 to about 1,800 in the last twelve years? There was no law of nature dictating that this would happen between 1994 and 2006. It happened because of technology. One bookseller said he knew it was over when he saw the mailman delivering packages from Amazon to the tenant upstairs. With eBay and craigslist, what is the economic model for daily newspapers? From printing boarding passes to tracking packages, to repairing complex software to deciding where to dine and stay and how to buy a plane ticket, jobs that used to be done by human beings – and often highly trained human beings at that – are now accomplished through well designed expert systems.

Check out a fascinating new book called *The Starfish and the Spider* by Rod Beckstrom and Ori Brafman. They show the power of decentralized, knowledge sharing

technologies to undermine whole industries which are based on a command and control approach to information. Simply stated, people around the world are building their own communities to connect with each other and share knowledge.

Political leaders recognize the fundamental nature of this transformation. I saw in the paper two weeks ago that the acting President of Turkmenistan kicked off his election campaign with a call for greater Internet connectivity. Put that in the time-warp category: how would you have reacted if twenty years ago someone told you the acting President of Turkmenistan kicked off his election campaign with a call for greater Internet connectivity? I was at a dinner several weeks ago with Alejandro Toledo, who until July of last year was President of Peru. Toledo had grown up as one of 16 children in a destitute village in the Andes highlands. Thanks to having met Peace Corps volunteers at the age of 14 he got a scholarship to the US. He has two graduate degrees from Stanford, and is the first person of Native American descent to lead his country. 46% of Peruvians live on less than \$2 per day. Toledo is passionate about helping the poor in Peru. He told me his first priority is education generally, and his second is getting the people of his country connected to the Internet.

So for question number 1 -- how is technology driving change in knowledge-based industries? -- my answer is that the networking of computers is transforming the nature of knowledge accumulation and distribution.

So let's turn to question 2: what are the key areas of vulnerability in the legal services business to these technological changes?

At a famous presentation at Black and Decker, a consultant held up one of these, a drill, and asked the Black and Decker executives if this is what they sold. They all

recognized the product and answered “yes”. He then suggested to them, that from the customer’s point of view, what they are selling is this, a hole in a board.

From the law firm think perspective, “sales” too often means a one to one relationship with a lawyer who bills by the hour. As a client, I can tell you what I want to buy is access to information, strategy, and negotiation, and, in the case of litigation, to courtroom skill as well.

There’s a fundamental misalignment at work here. Law firms cannot afford to own the business risks of their clients have a lot of employees to pay and also have to allocate the limited resources of extraordinary star partners. On the other hand, we clients want access to information and counseling and want to pay for value received. Put most bluntly, the most fundamental misalignment of interests is between clients who are driven to manage expenses, and law firms which are compensated by the hour.

The current system also mis-serves the lawyers themselves, particularly the associates, also known as the next generation of partners.

In most of my major law firms, I see more and more problems retaining associates. I am inundated with resumes of top notch associates who don’t want to work in large law firms any more. The *Wall Street Journal Law Blog* included a note recently that associate turnover in large firms from 2001-2004 was 19%, with one major firm over 30%. The chairman of one firm told me that only people in their 50s and 60s are willing to put in long hours these days that associates regularly turn down the chance to work on major deals if it interferes with social plans or a vacation. He finds a lot of younger lawyers self-centered and self-indulgent. Since I’m 50, I wasn’t personally insulted. But this reminded me of something I read recently, a complaint that “affluent parents have

become role models for luxury and licentiousness, and have moved far away from caring about whether their children develop habits of discipline and self-restraint. As a result, young people are increasingly impudent and have a total disregard of the respect they owe to themselves and others.” Pretty strong stuff. This was written by Tacitus in 75 AD.

Those who grew up with the Internet just view the world differently than you and I do. I’d like to ask everyone to raise your left arms. Go ahead. Left arms up. Now, everyone who is wearing a watch, put your arm down. I will tell you, that if all of us were under 30, the results would be the reverse. People under 30 do not wear watches. They use their cellphones. My college senior daughter wants a wristwatch to wear exclusively at job interviews, since she thinks she’s supposed to. My friends, we are dinosaurs, we don’t get it.

The difference in outlook goes deeper than that of course. Some of you may know Dick Gross, a mathematician who is Dean of Harvard College. I once heard him tell a group of parents that if they want to communicate with college-age kids, they better learn Instant Messaging. He told of coming into his 16 year old son’s room while the son was doing homework, and finding five IM conversations going at once on the computer. He asked, “How can you get work done when you have five conversations going?” His son answered, “Dad, you don’t understand, this is how we communicate. For us, IM is like email was when you were a kid.” I must ask, “If five conversations are open at once, how do you bill the time?”

This generation, brought up on Wikipedia and Kazaa, believes that information should be free. Upending one’s life to support inefficient means of communication, driven by a billable hour system, to maintain a relatively slim chance of making partner,

just doesn't cut it. And when the next generation heads for the exits, it's a sign of a business model under stress.

But if the economic system of the firm is frustrating to associates and even some partners, I can tell you that from the standpoint of a metric driven general counsel, it is more than incomprehensible. It looks like the last vestige of the medieval guild system to survive into the 21st century.

About a year ago, I testified before a House subcommittee regarding the Internet in China. It was a lengthy hearing, and it was grueling. I felt I'd been able to answer the questions pretty fully, largely because I'd spent two days beforehand being prepared by Ambassador Charlene Barshefsky at WilmerHale. If you shouldn't leave home without American Express, you shouldn't go to the House without Charlene. At the risk of mixing my credit card metaphors, her help was priceless. The total bill for her services was about \$10,000. I have spent 300 times that amount to get mediocre assistance in patent disputes.

The legal industry has spent millions on IT to up speed access to information. But the only way I can get that information is through an individual billing me by the hour. My in-house team often has more sophistication than the associates who mine the knowledge management system to generate a memo. We're just not allowed to access the information without paying for someone's time.

The systems exist today to change the delivery of legal information to clients. But that change would challenge a model that today delivers high profits. Every big company, including Cisco, is using those systems to make our support services more effective, and to drive down the costs of providing service. Law firms are not. Clay Christensen of Harvard Business School has written, and I quote, "Large American law firms are just

about the most profitable businesses in the world. Speedier information-gathering capabilities allow large law firms to increase utilization of less experienced lawyers without passing cost savings on to their customers.” So changing the service delivery model will be disruptive, and not just because associates are kept busy doing work that a machine might be able to do better. Changing that model will also cut into the effectiveness of cross-selling. From a client’s point of view, cross-selling is an effort of star partners to leverage the loyalty they have earned to drive hourly work to other parts of the firm. Today, there is little incentive for law firms to apply risk-reward logic to the amount of legal services provided. And General Counsel knows that.

The growing scope of knowledge availability will endanger this system. When technological change comes, it is easy to get left behind. Richard Susskind, who’s a brilliant English commentator on the legal profession, and who gave me the Black and Decker example I offered earlier, observes that when law gets standardized, it can be outsourced, co-sourced, integrated, aggregated, syndicated and shared. One-to-one consultative advice gives way to one-to-many information services. And the client becomes empowered.

My contention is that the very source of success for firms today – the ability to manage client access to information and require clients to use bespoke 1:1 systems – will be the source of failure in the future.

So my answer to question number two is that the greatest vulnerability of the legal industry today is a failure to make information more accessible to clients, to drive models based on value and efficiency. The present system is leading to unhappy lawyers and unhappy clients. The center will not hold.

And that brings me to the third question: What will it take to succeed in this changed environment?

Clay Christensen got it right when he said of our industry, “the forces that act upon service sector businesses are the same that act upon all companies.” And he predicted that a new class of providers will “develop new delivery models that will be highly disruptive to established firms.”

My answer to this question is therefore simple: first, winners will be those who are able to standardize services to meet clients’ cost management and predictability needs where very good is good enough. Second, those who can differentiate themselves by providing the top notch of customized services, where that is needed, will also win. In some cases, one firm may be able to do both. But my bet is that despite the consolidation trend we’re seeing today, top quality boutiques will thrive while the cost structures of larger centralized firms will put them at risk.

All around the periphery of the legal industry, standardization of information is happening. Check out www.taxalmanac.org, which uses wiki to create sophisticated, easily-searchable on-line discussions, and ultimately counseling, by tax professionals on a variety of topics. The legal work of generating residential leases and individual tax returns is now largely done by software.

Let me give you a few examples of the way this is now spreading to first tier corporate legal work. Let’s start with patent prosecution. At Intel, Bruce Sewell bundles patent disclosures and prosecution of the applications is awarded based on a reverse auction. The most successful firm is in Australia. At GE, Brackett Denniston has over 60 patent lawyers and agents, US trained and supervised, working to prosecute patents at

GE's Global Research Center in Bangalore. At Cisco, we pay a fixed fee for patent prosecution, and advise our firms to find ways to lower costs, since the amount we will pay will go down by at least 5% each year. We've got a fixed fee arrangement to review the offers of licenses which seem to arrive quite regularly these days. Bart Showalter, the partner at Baker Botts who leads that effort for us, said the fixed fee scared them at first, but over time they developed a systematic approach to the work, and as he put it, "the system made us more efficient." To get the measurable results we need, we are driving the use of knowledge sharing technology throughout the process.

In the corporate secretarial arena, at Cisco we got tired of the choice between the overhead of dealing with a hodge-podge of local firms and high billable hour rates from so-called global firms. So we are working with one firm on a solution. We're aiming for a 20% cost reduction compared to our current global costs. Now this firm doesn't have a huge global network of offices – but is ready to revolutionize the way information is processed and shared. Our goal will be accomplished by standardization of forms and open interfaces, making a smooth multi-vendor operation out of what had been a series of job shops. And we want to help them to sell this approach to other companies and other law firms.

In contract processing, we have an online contract builder that allows our employees globally to build their own NDAs and other contracts. With electronic approval and digital signature, they can go from creation to execution to archiving. Five years ago, Cisco had to build its own system. Today we're buying off the shelf. Within the next five years, a substantial proportion of the *Fortune 500* will be doing the same.

Counseling will be the next frontier, as tools like taxalmanac spread to other legal areas, from sweepstakes and promotions to export regulations to human resources to securities law compliance. We're working with eight other Fortune 500 companies, and a number of law firms, to create a site called Legal On Ramp. Legal On Ramp will allow direct access to search the firms' KM systems. The site will use Wiki technology to drive collaboration. If you don't know what a wiki is, I suggest you learn very quickly. And you can bet securities work, especially '34 Act and Section 16 compliance, will be one of the first targets. (More information on this at: www.legalonramp.com.)

Today, all of Cisco's US corporate, securities and M&A work is done superbly by Fenwick and West operating on a fixed fee. Gordy Davidson came to me recently and offered to keep the fixed fee the same this year. He thought he was being generous, or at least practical. I turned him down. I told him I wanted a cost reduction. But my goal wasn't to reduce my costs while hurting Fenwick's profitability. I suggested he propose a service level agreement for me, his client, to fulfill. The SLA will oblige Cisco to take on lowest -value-add tasks that lawyers were doing, and that we can do ourselves with our administrative staff. I told him we would share the savings. In this way, we become a better client, and we both win.

We are doing the same thing in litigation. We have a fixed fee with Morgan Lewis for all of our US commercial litigation. Not surprisingly this has made Cisco litigation avoidance a key goal of Morgan Lewis. We're driving down the time that human beings have to spend reviewing electronic documents. We bid out discovery work based on cost per gigabyte. In some cases we've outsourced document production to a different law

firm than the firm that is providing counseling or other support. But what we had to build ourselves five years ago is now becoming the norm.

Now as I said at the outset, you may disagree completely with my analysis, with my prescriptions, or both. You might even think I'm just trying to sell more networking equipment. But I ask each of you to grapple with the three questions I posed and come to your own conclusions.

How is technology driving change in knowledge-based industries? What are the key areas of vulnerability in the legal services business to these technological changes? And what will it take to succeed in the new environment?

The opportunity is there to recognize the business realities that will be driven by new technology. We can seize the chance to offer more value to clients. We can seize the opportunity for our own employees to be more engaged and productive.

Our mutual success depends on it. I'm fortunate to have great counselors like Gordy, Charlene, and Bart. They've helped ensure, through past practice and good preparation, that my company has no issues with its stock options, minimal comments on our 10-Ks, and only one piece of litigation listed in the last 10-Q, and that one has subsequently been resolved. I need those counselors to themselves have healthy businesses. Successful outside counsel is an integral part of Cisco's success.

We should all be very proud of our profession. We help drive compliance with the democratically-enacted laws of our country. In the last five years, we've accomplished extraordinary things. Since the dark days of the Enron collapse and the advent of Sarbanes Oxley, we've restored credibility to the institutions that are the backbone and the motor of the greatest economy in the world. We defend those who have done the

indefensible, even when the government threatens us for those efforts. We work to preserve the rule of law. In our daily work we do not fear, in fact it is our obligation, to speak truth to power.

We are in the midst of an economic revolution that is the most important event in economic history since trade routes opened from Europe to Asia. We must reach out and seize the golden ring that is just within our grasp.

Thank you for your attention today.

This month's Experts' Corner features a speech given by Mark Chandler, SVP and General Counsel of Cisco, in San Diego, CA at the Northwestern School of Law's 34th Annual Securities Regulation Institute. The conference brought together national leaders in securities law, accounting and government. To read the online introduction to the speech visit: http://blogs.cisco.com/news/2007/01/cisco_general_counsel_on_state.html.