Stanford eCorner

Changing Finisar Technology and Business Practices

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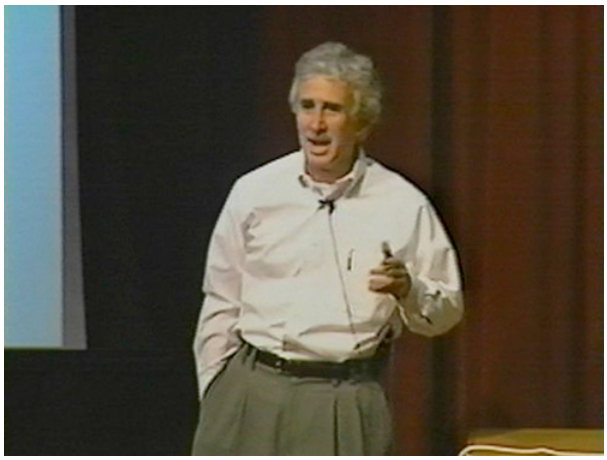
As a company grows and develops, it is possible that its methods for design and production change, says Levinson. The company may also look to new avenues of possible innovations. He describes the changes Finisar has seen over the years.



Transcript

With the acceleration and, I guess, the slow down with an optical equipment, what business processes have changed at this area, in terms of how you go out and do business and everything from inventory and everything? We took the classical Silicon Valley approach. We try to innovate faster than ever and I think we're doing it. Today, we can make a 10-gigabit per second transceiver that's the size of that pen cap. That's a full laser photo-diode amplifier, the whole bit. It runs for less than a watt. It's competitive with what others sold a year ago or within the last year for $30,000 and for 20 watts and things this size. So first, we're trying to innovate like mad. Second of all, we're trying to see where and what's holding up our market. And this is a super-nerd thing. So if anybody starts drifting off, we'll just say, "OK.

Let's pause for a minute. We'll go talk some place else." But what Finisar and what happened to the optics space is this. JDS and those guys worked on the national network, the long haul network. And at one point last year, the total Internet of all the packets lodged into it where brought to one point and counted and sent back out. It was about 15 terabits per second, on average, if you average the whole day traffic, sometimes more, sometimes less. It was about 15 terabits. Finisar sold optics into buildings for connecting storage and for connecting the backbones of Ethernets and things like that. In November, December and January of last year, we sold 150 terabits per second per month into that space over here. So here's 15 and here's 150 per month. We just saturated it.

We just poured it in. Connecting these two spaces is the Metropolitan Area Network that ties things together. And that's done by the twisted pair from Alexander Graham Bell. It's T1. It's DSL. It's garbage. And the problem is we have got these two magnificent islands of connectivity floating on a sea of non-connectivity. So Finisar used almost all of our money last year trying to solve the Metro problem. Today, we can take a switch from extreme foundries at Cisco, plug in a model for it that looks like all the other ones that we ever built last year by the thousands per week, and a little 1U box goes in it. And we can network like Terman onto the Internet at a gigabit.

If there were multiple businesses in that building, we can serve each one of those business with 100 gigabits switch service, and we can do that at $200 a port. Not per month, just 200 bucks, got to rent the fiber. So today, we can deliver 100 megabits to multi-tenant dwellings for less than the cost of DSL and the T1s. And that's what we're trying to do. We're going to try fill the gap between these two things and power that up. When we do this market -- if we fail, it doesn't matter to me. It matters because I really care. I want to win. But what really matters is that someone has got to fix this problem. I think we're the ones that are going to it.

But when we do, this long haul market takes off because of the stresses put on it. And this very short haul market takes off because all of a sudden, there are things that leave that market and there are reasons for people to have more bandwidth. But all sorts of models of computing don't work when you have copper wires tying together two things that are going at near terabit rates. So all this video on-demand and how would you download movies and how would you do distance learning and how would you do conferencing and how would you do ASP software, all those things. You never double-click Microsoft Word and launch it over a T1 line. We might as well go home. But at 100 megabits, you do it all the time. And so we have to solve this connectivity problem and that's what we're doing.