

A Virtual Evolution
Hal Clark and Ido Cohen Interview
Tape 3
INVESCO

(Music)

HC: Hi, I'm Hal Clark, Senior Client Portfolio Manager for the Invesco US Growth Equities Team. I'm here with Ido Cohen, our Co-Portfolio Manager on our Large Cap Growth Team. Ido, welcome.

IC: Thanks, Hal.

HC: So, Ido, in addition to being the Co-Portfolio Manager for the Large Cap Growth Team, you've been covering media, telecom and Internet companies. Can you tell us a little bit about what you're seeing in terms of the mobile data cycle?

IC: So, Hal, I think it's an incredible time to be investing in mobile. I think the first thing you have to realize is that most of the world today connects wirelessly. About 70 percent of the globe now has a mobile phone. That's about five billion people. But only about 20 percent of the population has a smart phone, an Internet device. And I think that's important because

surprisingly at the end of 2013 only about 25 to 30 percent of households had a connected PC or access to the Internet in their homes. Now that number seems like a low number for connected PCs, but keep in mind that landline broadband connections are far less prevalent in the emerging world than they are in the developed world. So what that means, I think, is that we're now approaching likely in early 2015 a global inflection in connectivity. So this year we will likely see smart phones priced at just 25 or 35 dollars, and those hardware prices should push us over the PC barrier. And over the next three years, smart phone penetration will likely hit 50 percent, and then in five years close to 70 percent.

So I really think you need to take a step back and think about that, because it took us about 23 years since 1990 to get to Internet penetration of about 25 percent of homes, and in the next three years we'll double that. And in the next five years, we'll almost triple that. So when you think about what we call the Information Age, which is this period that started in 1970 with the introduction of the personal computer and promised the availability of information to everyone, the power to access the collective knowledge, the power to join in one to many communications, the

power to participate in a global ecommerce market and all the productivity benefits of all those things. That's all coming for most of the world in the next three to five years. And I think that's a really profound to think about. I think it's going to be a phenomenal time to invest in growth strategies, and there's going to be a lot of change, and there's going to be big winners and there's going to be big losers, and we think a lot about that everyday.

HC: All right, so can you give us examples of the change and some of the things you're focusing on?

IC: One of the biggest things that's changing is our behavior. So five years ago the US consumer hardly consumed any media or content on their phones, but now these devices have grown in their ability and the networks around them are getting faster and the price of capacity is coming down, and people are relying on their smart phones and tablets more and more. So in the US we're now spending almost 20 percent of our media time on mobile devices. That's already more than all of print and radio combined, and it happened in just four to five years. Plus it's still growing really rapidly. I think we're on a pace right now where in five years we might spend as much time on our

mobile phones as we do watching television, and that kind of change has massive implications.

HC: Sure, but can we really get there? It seems like cell phones are just less reliable than television. What needs to happen?

IC: There is still a lot of infrastructure that needs to be deployed. Globally we already discussed it. There's a coming wave of smart phone users, and emerging markets need to focus on data coverage to get to all those people. But in developed markets like the US and Europe, the networks need to focus on capacity and contend with the new way that we're using our wireless devices. Cisco has estimated that mobile data is going to grow at a 66 percent annual growth rate from 2012 to 2017. To support that we need to make the networks more dense. We're going to need more towers, we're going to need more cell sites, we're going to need more fiber to our towers and we're going to need more capacity in the core of the network. But I think the real bottleneck is the thing that we can't make any more of. It's the wireless spectrum, the frequencies that we use to carry all the traffic. They're finite. And smart phones are changing the way that

we use those frequencies, too. So when you think about the old wireless world of voice and text, traffic was symmetric. We sent just as many bits from the tower to the handset and we did from the handset to the tower. But now the handset's becoming a multi-media device, and so the downstream traffic is growing much faster. Citibank estimates the ratio as nine to one down to up, but we've been doing work and I think the number nine to one is probably conservative.

I think it's important because spectrum has to be licensed to go in one direction or the other. You can't just flip it around. The FCC won't let you do that, and also the networks have already been built to assume the traffic would be going in one direction or the other. So that all makes the downstream spectrum especially scarce, and we think it's value is growing very rapidly right now. There are a few companies in the US that are sending on a lot of unused downstream spectrum, and we think those companies are in a great position long term, because things are changing faster than you think. But we like that, because you know, change is the fuel of growth, and that makes it a really exciting time to invest in growth strategies at Invesco.

HC: Thank you, Ido. And thank you for watching.

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