

I had a very enjoyable debate with Avner Rosen of Boxee yesterday at SXSW. We tended to go around in circles defending our positions. His (to paraphrase): the internet will do what cable and satellite do, but it will do it better. That Microsoft and Apple among others will in the future come up with new ways to do it all better than we can now.

Mine: Of course the internet can support video, but it can't do it as well as the current digital cable and satellite distributors can, nor is there a profit model that would ever incent content providers to switch their content from the internet to TV.

I won't rehash it all here, but the most salient comment came from the audience when someone asked "What's the difference if the gatekeeper Microsoft/Google/Apple rather than Comcast/Time Warner/Directv/Dish?"

Of course the questioner was right.

Bits are bits. The economics of content are going to search for the best place to be monetized, regardless of the delivery platform. I think the current model will be the place content finds, Avner seemed to feel it would be some future internet.

It shouldn't matter.

We both seemed to agree that one of the biggest future changes for the internet will be an increase in bandwidth. The question that needs to be answered is "how will all the new bandwidth, both on the backbone and in the last mile be used?"

Will it be used for digital video content, ie, TV? Why would we want it to be used for TV?

The internet has the opportunity to continue to be transformative. There are applications out there that can change the quality of our lives. I'm not talking about the ability to update your facebook, or check out what where everyone is at on 4Square and twitpic what is happening to your friends and followers. Social Media is one more amazing communication platform that is impacting our lives. But it's not transformative.

There will be transformative applications that need all the bandwidth they can get. Medical, Transportation, Defense, Gaming, Simulations and who knows what. As computers become more powerful, we need to be able to send more data to the cloud where they can crunch data and return it to us.

That is the value of an open internet. The things we can't imagine today. The applications that are just dreams because they don't have enough horsepower and bandwidth to work today. I want the internet to be a platform for amazing. Not Gilligan's Island reruns.

I recognize that with openness comes the risk of the least common denominator dominating. Porn has just as much right to dominate the net as any other app. But should it?

Yes it should. The lesson of TV over the internet vs TV over digital cable or satellite isn't about openness. It's about the value of Application Specific Networks. Digital Cable is an application specific network. Its only job is to serve up content and it works very well.

The FCC needs to recognize this and start working with internet broadband providers to define tunnels, Private Virtual Networks or just plain reserved bandwidth that are saved for future applications. When a transformative application presents itself, there should be an opportunity to define the network to optimize that application.

In the event some form of ubiquitous entertainment comes first, takes over the net and saturates it, how is the FCC going to solve the bandwidth traffic jam? **They won't ever be able to put the bandwidth genie back in the bottle.** Screaming at broadband providers to spend the money won't work any better than screaming to expand highways helps to alleviate rush hour traffic.

The FCC wants Internet 2 at universities to flourish and develop new things. But where are they going to roll them out to if all of our bandwidth to the home is being used for some new form of 3D virtual fantasy sports?

I just don't think these things will just manage to take care of themselves. The reality is that when we run into future internet application roadblocks our politicians will jump in the mix and attempt to "solve" the problems. You know where that will get us.

We need to start the process now of putting some bandwidth to the home away for a rainy day. Not only do we need to preserve bandwidth in the last mile, but the FCC also needs to figure out a way to create a transparent market or exchange that allows competing applications a means of knowing how and when they will have access to bandwidth when, not if, it becomes constrained.

And if you really want to make things interesting, the company that is doing the most work on realtime markets and competing for resources that I know of? Google.

Deal with it today or struggle with it in the future.