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Video Future & 3D TALK



Dr. Harald B. Karcher

Barcelona, La Florida, 2010-02-11: NetEvents: The Future of Video. Coming Soon to a Screen Near You. Moderation: Vince Vittore, Principal Analyst, Enabling Technologies, Yankee Group.

[Vince Vittore](#), [Yankee Group](#): My role at Yankee Group is, I cover the video infrastructure and services market, largely around the consumer, but there is a lot of this infrastructure and services creeping into the enterprise. So the way I would characterise video and the future of video is really: Video changes everything and everything does change with video. From the consumer experience, we see a tremendous amount of change happening from the video services. If you think about ten years ago, the video experience was largely around the TV. You'd sit, sometimes you'd sit with people you knew, your family and friends. You'd watch content. It would come to you and it was basically a passive experience. Fast forward to now, and five years in the future, we believe that and we clearly see the evidence that it's going to probably be potentially a solitary experience, potentially a social experience, depending on who you want to believe and what applications you're talking about. It's definitely not going to be just broadcast. It's going to be much more of a

personalised experience and it's going to be much more interactive... It's also going to become very mobile. It's going to be anywhere, any device, any content. We actually are moving to that type of



environment, where eventually all content will be available... we really call that the anywhere network, the anywhere consumer, the anywhere enterprise. From an enterprise and SMB experience, think five years ago. Video was largely expensive. It was top down driven, lots of broadcast, the CEO broadcasting to the troops, some training perhaps. So there was a lot more of a top down driven experience and it was again generally broadcast... now we see much less expensive experience, **it's going to much more interactive and it's going to be collaborative. What does this all mean for the network provider?** For either the network provider or the enterprise, it's going to mean a **whole lot more bandwidth.** Lots of questions around how much bandwidth is really going to be available, what is really going to be needed. The other part of the equation is, it really sets up a very unsustainable business model, very unstable. Lots of questions around the service providers and can they actually sustain this. What is their role going to be in video? We're going to tackle some of these questions. From the consumer experience, backing up a little bit, again we call this the anywhere consumer. It's our vision of what happens, when you have truly ubiquitous connectivity, when you can actually get content anywhere on any type of device, regardless of your location, it does not matter, regardless of the language you speak, regardless of what you want to see. It's being able to call up any type of content anywhere and being able to collaborate as well. I'll throw out some stats here. This is a US survey that we have done. We see this anywhere consumer and video converging. And when we asked the question of what kind of features are you

looking for in your mobile device, you see the top one is actually a built-in camera or camcorder. Five years ago that built-in camera and camcorder was at the very absolute bottom of the list. No one thought about cameras on their cellphones or mobile phones. Now I would hesitate to see if anybody can be selling a mobile device without a camera or some type of a video element, a visual element to this. Looking at the enterprise, our vision of the anywhere enterprise is somebody that can collaborate, who can access information, who can communicate with their peers regardless of location. I'm a good example actually of the anywhere enterprise. My company is located in Boston, I'm located in Chicago. I'm the only person in Chicago. I work out of my home full-time. I talk to my colleagues all the time. Ironically the person I talk to most is not in Boston, he's in Paris. I talk to him all the time via video. So the idea that you can collaborate regardless of location, regardless of the type of equipment and really regardless of what you have in your work and you have to collaborate with different people and different projects in any location, that's really the idea of the anywhere enterprise. And what happens when you get that truly ubiquitous connectivity... We asked SMBs in terms of what are they really interested in video conferencing... We asked them why are you interested in this type of videoconferencing devices. And it's reduction of travel. It's very simple. It really comes down to ROI. So without belabouring the point, some of the key questions that we see really around this debate is really broken down into three sectors, technical, financial, society and policy. We're not going to cover all of these, we only have a half an hour hopefully. But we'll try to touch on as many as possible. I'm going to let the panel introduce themselves and I want you all to tackle the question, as we move into this future of video environment, if you think about a video-centric world. Cisco has put out the number I think 90% of all IP traffic is going to be video by 2012, 2013 sometime, as we move into this, introduce yourself, talk a little bit about your company and the role you play in the video environment. What's the biggest hurdle before we really get to a truly video-centric environment? Ofer, would you like to start?

Ofer Shapiro, [Vidyo Inc](#), CEO: Sure. So when you look at large deployments I think it's all a matter of matching the quality and the cost with the application. So we do have a very diverse world and it's very different in many applications. For video communication for example, I think all the components are there today. The world of video broadcast, especially HD video broadcast over the Internet, is still something which is debatable, if you could do advertisement supported and pay the bandwidth costs, unless you're Google. So this is something that is going to unfold. I think it's first that. Before that, the doomsday scenario of it will flood the Internet it will get congested. Maybe we'll get to it or not. I think it's first an issue of the economy of the different applications, which will have to be sorted out because it changes a lot of the value chains that are available. And we also looked a little bit into the growth space ourselves, but I don't want to take too much time. I've already monopolised the microphone time this morning.



Dr. Carlos Fernandez-Catalan, [Polycom](#): So I'm Carlos Fernandez. I'm leading in Spain and Portugal in Polycom. As you all know, Polycom is a leading provider in audio, video and tele-presence solutions. Our strategy is mainly focused on the UC space, that means unified communications. That is based on strong alliances with Microsoft, IBM, Broadsoft, Juniper, these kind of companies, in order to bring as simple as we can a solution, link it to your business processes in terms of enterprise, link it to a managed service with a WAN-TesLA, with the WAN 2 services, quality of services for the service providers and as well attack, if you let me call it that, the consumer market with IBM alliance for example for the home tele-presence. What we foresee for the next eight to twelve quarters is an increase on demand of our products 13% to 15% next year and 25% on eight quarters approximately. So the future we really predict based on 2009 demand is huge. We want to make video as a very important part of your life, of your daily life needs in terms of transportation, in terms of healthcare, in terms of education, justice, cellphones etc.

Jim Machi, [Dialogic Corporation](#): Hi Vince. My name is Jim Machi from Dialogic. Dialogic provides enabling hardware and software platforms for companies that make some kind of value added service application. Typically it's some kind of mobile video application around the world. So for instance we sell video gateways and video media servers. We don't create applications ourselves so we enable our customers to do that. And so we see a wide range of these kinds of applications. To answer your question about what are the issues right away, I would say from the consumer side, the consumers don't know if a video call is included in their rate. How

much do they have to pay? Is it \$3 a minute or is it included in the flat rate? When they typically do one of these or see one of these value-added service applications, they like it a lot but they're wondering about how they use it. So I think once that gets worked out better than we'll see the consumers using more and more of those kind of things.

Vince Vittore, Yankee Group: I would add to that. One of the interesting things regarding the ability of consumers and willingness to pay, when we asked the question of how much are you willing to pay for any new service, typically the answer was zero. Pretty tough business model, it's free.



Brendon Mills, Ripcode: My name is Brendon Mills. I'm the CEO of Ripcode and we make video trans-coding and delivery middleware for providers of video to desktop, mobile and Internet TV. So our customers include Web 2.0 properties to service providers, to even military applications with drone videos for example. And so our charter is to provide that technology to transform video to multiple screens, whether that's mobile, again desktop or TV type screens.

Vince Vittore, Yankee Group: What's your biggest challenge? What keeps you up at night?

Brendon Mills, Ripcode: We live in the IP world. We're more of a networking company than anything else. And there's such a transformation of IP, for example **HTML5** is a big upcoming change in regards to the containerisation of video such as Flash, WFlash video or the Apple video issues. And so those types of market and commercial changes really keeps us up at night and makes sure that our technology is keeping up with those commercial changes.

Roderick Snell, Video Convergence Forum: I am Roderick Snell. I founded a company. **I trained at the BBC** and my first experience was pre-BBC when my father told me that the stereo sound system that I'd made as a kid would never catch on. Two loudspeakers, two lots of electronics, it's too complex. No one will ever buy it. And in the BBC they told me there was nothing in sound that mattered above 7 kHz because no one could hear it. And when I started working in television standards converters, I was told that the world demand, this was by the analysts, you guys, the world demand for television standards converters was 12. And I think my company, that I'm now partially retired from, has made 8,000 of them or something and is still making them. So the analysts need analysing. I was just on my way and I picked this thing up. I was about to throw it away and I thought well, this was the future of entertainment. This is always new stuff you're talking about. The date is 2005 and it was all happening like that day. So I suppose one of my questions is you guys need a [slide rule] over you. Who keeps getting it wrong? How do you really work out when it's going to happen? And the last thing I'd say, I'm in violent agreement with Ofer about the quality issue, but for completely different reasons. It's to do with digital cinema and consumer costs. But that's later.

Vince Vittore, Yankee Group: I can defend the analysts slightly if you'd like. **No one is going to buy a report that says the market is going to be flat...** So lots of different types of applications and we were talking earlier this morning that the applications will vary quite a bit depending on your perspective. As we move to a truly video-centric world, a video-centric environment where I think several people have mentioned, where video needs to become part of your daily life, and Ofer, I agree with you, the hair thing, combing my hair will be a problem I believe, when I have to be on video every single day. But as we move into that environment, what's the application? Is there going to be a single application that really is the tipping point and gets us over that hump of video is a nice thing to have to video is a thing I absolutely have to have as part of my daily life. What's the application?

Jim Machi, Dialogic Corporation: Let me go first. **We see four types of applications** that our customers are putting out there. One would be some kind of **mobile commerce**, like an IVVR, and that's actually pretty popular from a mobile perspective. And then we see like some kind of **entertainment**, some goofy game or something like that, and you could say well, I don't know if that's going to really explode but caller ringback tones at one time were goofy things, but now they're pretty mature. Some kind of portal, like a video portal, think about speech portals going forward **and then just a network service like calling, like Facebook click-to-call.** We have a couple of customers doing that kind of thing. So I don't think there's one

app. I think it falls into one of those categories. And you'll just start seeing more and more of them and it'll become part of our everyday world in using them.

Vince Vittore, Yankee Group: A real quick follow up to that. The social networking aspect of this, how important is that and what role does it play and I guess anybody can take this question. It's what role does social networking play in the future growth of video services?



Ofer Shapiro, Vidyo Inc: I think **the social networks is the consumer unified communication** because it's clearly there. Unified communication has a lot of meanings and a lot of vendors are twisting it in different ways. But essentially in the enterprise, it's you start from that instant messaging or some collaborative environment and from that one click to a voice, video and so on. In the consumer it's clearly the social networking where everything starts. And then you show your videos through it, you communicate with people with it. You will get entertainment through it because people will recommend to each other everything. So social networking has a huge impact on this. And I think just to tie this to what the future application is, I think it's always nice to say let's forget for a second, the way the commercial market is arranged today or even the commercial aspect of the consumer market. Just think

Captain Kirk had a tele-presence forty years ago. And it took us forty years to catch up with it. What's then the expectation of someone in what Cisco call the connected life environment? It's an interesting concept which is basically you have media files, you have people you want to communicate and it's all covered under some kind of an iPhone like interface where you've rung the person and you put it next to a movie and then you're both watching this and then you add another guy from your social network of course. And that's how it's supposed to be, the media and the people and it usually has to do with video. Video needs to be ubiquitous in the way you handle them. We actually experimented with applications like that. We created some prototypes to look how they look like and we showed it to some people. So forget about the economics in delivering it for a second. That's what we mean. So we think this is to look vision-wise, forget about what the hell is the business model around this which is complex. I think that's what is going to happen.

Vince Vittore, Yankee Group: That's the next question by the way, is the business model. But anybody else wants to tackle applications?

Dr. Carlos Fernandez-Catalan, Polycom: If you let me just jump into that, going back to your application question before, I'm quite sure that in the short term whenever the industry were able to explain their needs, **we all have in our life to have video. It will be absolutely necessary whenever you get to a doctor, to a hospital, whenever you attend school, university, whenever you are in a train station and you want to get informed, many, many applications that today are implemented but not properly explained from the industry.** And it's not only a question about saving cost. This is an argument that is laid out since many years. It's too simple. It's like the technical questions. It's too simple to solve, it's just a question of timing passing by. It is a question of productivity and it is a question of efficiency of the service you as an end user are getting and the need you have to have that services right now and with the quality you need for it. I'm talking about **healthcare**, I'm talking about **justice**. You need to have your witness there for whatever judge you need. This is a need and for that the technical requirements need to be explained correctly from us, from my industry like Polycom.

Brendon Mills, Ripcode: Just another comment about the social networking. **Today Facebook gets 650,000 videos uploaded per day. YouTube is over a million videos uploaded per day, MySpace is at 450,000 videos uploaded per day and Yahoo is around 500,000 per day. That's just videos uploaded on a daily basis, with social networking or user generated content today. And I think what's really happening is that as the Web is moving away from a textual based reference point to a visual based reference point,** that's where video becomes much more important and much more of table stakes for just having a Web based experience today. So there will be monetization issues on video but to some degree a large portion of the video that happens will not be monetizable in above itself. And we talk so much about Hollywood or over monetizing premium content but that's just the tip of the pyramid as far as the volume of the amount of videos that is really hitting the Web that will never be monetizable, but you have to have.

Vince Vittore, Yankee Group: I'm going to open up to the floor. I believe we have a few minutes left for questions here. If there's any questions please raise your hand. If not, I'm going to throw up the big business issue. You mentioned it right now, it's how do you monetize this. From the enterprise it's clearly they're willing to pay for it. From the consumer side of the world, most people aren't willing to pay for it. I do use Skype video quite often and yes it is sketchy at best. But I get a full refund every time I don't like it.

Dr. Carlos Fernandez-Catalan, Polycom: Let me raise to you a question. Imagine you have whatever we release that says something called **home tele-presence**. That is a warranty, the service provider provided to you, the user over whatever DSL or whatever the technology is, integrated with Microsoft let's put it like that. Would you pay an extra small amount per month on a pay-per-use model for having that warranty integrated services for the home tele-presence stuff. I think most or at least this is what we have as the data from you analysts, most of the users, they are willing to pay that if it really is integrated and warranted services. **So it is now for us, for the industry to really deploy these home tele-presence solutions like Polycom has today**, widely and show to you that this is possible in an easy and integrated way.



Roderick Snell, [Video Convergence Forum](#): When the cinema world started to

discuss cinema standards for distribution electronically, which I was involved in, the whole setting of the standard was really pitched to hold the thing back, it was defensive. **And yet you know that cinema has a key impact on broadcast television.** And when broadcast television sets its standards and it's just doing it now for digital transmission and HD, I think this may be half conscious, but half of what it's doing is trying to hold back the IT world. And as a television guy I'm saying to them if you don't integrate successfully what broadcast television does, because remember the cost of these screens is a function of the success and volume. So as Ofer says it's critical if cost is critical that you have volumes sufficient to keep the price low enough to be usable in the new ways you want. And the standards setting world is screwing up because they are not taking account of the IT understanding and requirements for latency. The BBC has just proposed that their transmissions maintain a standard which will ensure that it's tougher and more expensive to have low latency. So joining the dots, the detail of how you cut the sausage is pretty important even if you don't want to narrow down on the fine points. Defensive standards which either protect IPR (intellectual property rights) or protect the position of broadcaster in an IT world will slow you down. And unless that's out in the open it will be up to you guys to point it out and the broadcasters and the standards setting bodies will be then forced to be compatible in the way you need, if that's not too complicated a question.

Brendon Mills, Ripcode: I would agree. Defensive standards clearly have been in existence forever. And we see it all the time and I see this, I guess the question to you then is how do you connect all the dots? And is there a requirement for, I hesitate to bring up politics and policy, but is there a need for government intervention to bring this all together.

Roderick Snell, Video Convergence Forum: I think it's for the less technical people to be informed about it and to find a way of getting the message across. Because what Ofer describes as a good end result, as an engineer I can see what you need to do to achieve that.

Jim Machi, Dialogic Corporation: I agree but I think that's more of a longer term issue. Right now at least on the consumer side, that isn't holding it back. It's more of as we say a pricing issue. People are worried about it and how do you monetize it. There's advertising insertion just like TV but there'll also be some pressure on the incumbents. Somebody will create a pricing model say, the third place service provider and then they'll put pressure on everybody else to be able to deploy the video. So I don't think we're quite there yet. At least on the mobile side it's on an issue right now. I think that it's a pending issue. But right now I think the bigger thing is, can people actually use it, are they able to use it with their payment plans right now. That's what they're worried about today.

Roderick Snell, Video Convergence Forum: You could put a tax. This is really coming from a different place because I see that what they're doing in maintaining the old standard is putting a tax on every screen, in order that it's compatible with both your need and the broadcast need and it costs more. And it needn't cost more.

Ofer Shapiro, Vidyo Inc: Several fields that you could actually identify things like that. One has to do with the way broadcast content is being available on the Internet, which obviously if they do it, they do it, the content owner has all sorts of draconian agreements and you get only partial of the season and only three days after it was on broadcast and things like that. Of course the cable networks especially in the US, I'm not sure exactly how it works in Europe are really creating a lot of burdens to grip you on paying them this flat rate and the pay per view really. And in the mobile world I actually think that the way people offer data services, it's expensive sometimes to use them for emails. I once travelled with a data card that Thierry got me in France in three countries in Europe for one week, only business email. And I came back from the trip and he calls me up and says you're out of your mind, I got 4000 Euro bill. 4000 Euro for one week, three countries in Europe, regular email access. So clearly if you look at the price point, a lot of them are protective..."

Roderick Snell, Video Convergence Forum: The model for the cinema was to make the standards so high that we'd never be able to do it. They screwed it up because it wasn't high enough and now it is being done, the 4K, the 4K standard. We on the other hand had another way of attacking it. We demonstrated it to Hollywood and we actually won the beauty contest that digital cinema 2K was good enough for the movie experts. So there were two approaches. One set the standards so high that they thought it would be ten years before you could achieve it. Actually they did in four. The other way was to say hang on a minute, what we can do now is better than you think if you do it properly and we got all the movie experts in. They said, oh, hell, that's nearly good enough, yes we think we have to buy that at 2K.

Vince Vittore, Yankee Group: We have a question over here.

Unidentified Participant: To probe a little more on Roderick's point from the business point of view, I would argue that what happened with the standards on digital music with MP3 were not defensive and that had a catastrophic effect on the industry. Is that really an argument for the video broadcast industry to do the same thing?

Roderick Snell, Video Convergence Forum: It's a better question than I have an answer for.

Ofer Shapiro, Vidyo Inc: I think it created a new industry. So it was bad for some people and it was very good for other people. In general it was good for the consumer for sure.

Unidentified Participant: So talking of cinema now, the big thing is 3D again, everything is 3D right. So are we going to get 3D on laptops and things? Do we all have to wear special glasses for videoconferencing?

Roderick Snell, Video Convergence Forum: It's easy to do.

Vince Vittore, Yankee Group: We were discussing this actually at breakfast and I came up with the application that I think will drive 3D, gaming. **If I can play Wii tennis in 3D, I'm sold. I'll pay for it.**

Vince Vittore, Yankee Group: **So let's talk 3D. It's emerging. We're starting to see some. ESPN has announced in the US they're going to be broadcasting in 3D.**

Roderick Snell, Video Convergence Forum: **We're doing it in the UK.**

Vince Vittore, Yankee Group: **You're doing it in the UK. So when does it migrate to other screens?**

Brendon Mills, Ripcode: It's very rudimentary right now. There's a lot of exciting things going on. We talked this morning about stereoscopic in-coding, 4K, 8K. It's going to be embedded where you'd have to wear glasses at some point. And that can be an improvement today. So that's exciting stuff but I still think it's ten years away. But 3D today wearing glasses is still somewhat a niche market.

Roderick Snell, Video Convergence Forum: Not in cinema. I would say that's the milestone of that would be not in cinema. It's not a niche market in cinema.

Brendon Mills, Ripcode: **Specific content correctly. But again it becomes a little old. After the movies pander to the 3D experience, after a few years it gets less exciting.**

Roderick Snell, Video Convergence Forum: Yes, I can believe that.

Vince Vittore, Yankee Group: **When do we see it in mobile?**

Brendon Mills, Ripcode: **I think right now. It's easy**

Vince Vittore, Yankee Group: **Will there be bandwidth for it?**

Jim Machi, Dialogic Corporation: I don't know about the bandwidth, but right now we're still, a lot of the world is still rolling out 3G. So you've got to remember in Europe it's been here a while. But in Asia, in China and India, it's just starting to roll out. **So we've got a long time I think before it comes into mobile.** I think Brendon's

right.

Vince Vittore, Yankee Group: What about the desktop then? Do I want to have a videoconference in 3D? Do people really need to see the stubble?

Ofer Shapiro, Vidyo Inc: I think 3D helps. In general if you want to get with videoconferencing is you want to get a more immersive experience. And one aspect of it may be 3D. Another aspect of it could be multi-view, which is the ability to feel that you are in there in that environment, the type of Star Wars type tele-presence. It doesn't have to be real 3D. It could have to be perspective based, which in some cases is easier to achieve actually.

Roderick Snell, Video Convergence Forum: The Microsoft Light Simulator achieves that very cheaply and simply, doesn't it?

Dr. Carlos Fernandez-Catalan, Polycom: This is basically the point I want to make. Today for the industry, for the enterprise and as well for the service providers, not for consumers, with the immersive tele-presence that we have, at least a couple of companies in the industry, like Polycom, you have this feeling you are in the same room. You can have the same feeling as we have right now. So for the enterprise and service provider market today I don't see this need. But of course we need to wait for other industries to come with a standard, cheap technology in order to bring that back to enterprise.

Ofer Shapiro, Vidyo Inc: And by the way tele-presence, the immersive tele-presence is something that's all about natural. And then you have people going into this natural room and you tell them put on the glasses? That doesn't sound like.

Vince Vittore, Yankee Group: They'll never do that.

Ofer Shapiro, Vidyo Inc: So it's mainly something to do personally.

Unidentified Participant: Yes, I just wanted to raise the issue with the panel if they could discuss perhaps I heard the expression unified communications at the beginning and we've been talking down very specific vertical boxes. Can we come back to the collaborative and unified aspect?

Dr. Carlos Fernandez-Catalan, Polycom: I can take this one. Unified communications for Polycom is the key driver to move forward. We have close agreements with as I said Microsoft, IBM, Juniper, Broadsoft, Abadia and others. In order to make that easy and absolutely link it and integrate it into business processes. I will tell you a secret. When I was working in Nortel, something like 12,

15 years ago, I was already selling unified communications. I think we will be talking about UC for many years. And if you want me to tell you the truth, UC is about making things simpler, at your business, at your home, etc. etc. So if you base your technology on the standards, if you develop your technology according to others, only standards and you pick out the best from transmission, from servers, from soft switch etc. etc. you can build that interesting idea, an interesting solution for every customer, just picking out the best from every technology.

Roderick Snell, Video Convergence Forum: Wish it was so easy. I'm thinking of VHS and Betamax at one end and then HD DVD and Blu-Ray. These are failures to achieve what you want and actually set us back years. And so this is why I see the analysts and the consultants' job, or one of their things is to show up these kinds of screw ups really because it's always possible to get a group who will agree, if there's another significant group and it might be a national issue, it might be a big company issue, an issue of pride or whatever it is. The success of Blu-Ray or HD was set back two or three years, because each organization had invested so much money in their standard. And the longer it went on, it's like the wars, isn't it. You put so much into it you've just got to win. But so has the other guy. And that's what slows things down.

Dr. Carlos Fernandez-Catalan, Polycom: Absolutely. But there is some examples quite close to us. If you use Microsoft for example and you use VoIP it is quite simple to have an integrated version of a small UC approach. I fully agree with you and this is all about money, it's about industry. But let's take the example. I mean, you have in your Microsoft Outlook integrated your high definition video and as well your voice. It is a kind of let's say pretty predictable solution for unified communications. Of course we have other hurdles to come that will never be overcome because of industry priorities for sure. But because of the two faces of the industry today in terms of open standards and closed standards, the open standards industry like Polycom we need to try to find this middle point in order to offer the best from servers, from voice.

Ofer Shapiro, Vidyo Inc: One more quick comment on UC. UC is a big word. It is used for many, many purposes by many people. It is the applied UC. UC means if you have a communications system, it has to be integrated, Microsoft OCS (Microsoft Office Communications Server) has to be integrated with Microsoft Outlook. That's what a huge portion of the population wants and all the vendors in the videoconferencing industry we've taken care of it. It's practical, it's easy, people want it and it's achievable today. It's done. There's a bigger context of people who are talking about UC and those are usually really quickly deteriorating outside of the realm of practicality in real life.

Vince Vittore, Yankee Group: I think that's all the time we have. I believe we're going to break. Thank you very much for the panel. Give everyone a round of applause.