Streaming Media Transcript
Speakers: Susie Wee and John Apostolopoulos

Susie Wee: One of our biggest challenges lies in taking streams of visual information and directing them down this maze of the network in a way that they don't collide with one another. The technologies that we're developing allow people to communicate no matter where they are in the world, but also no matter what network they're on, and also no matter what device they happen to have. So this is what we call the seamless rich media experience.

Now in order to make this happen, we have to take those networks and make them able to handle media streams, real-time media streams. And given those that networks weren't meant to do that, there's a lot of work that we need to do. So we place these overlay nodes on top of the network in strategic locations, and then what we do is actually catapult streams across the network using these nodes to really make it possible.

John Apostolopoulos: So, if a sender creates some content, and wants to send it to a receiver, in order to prevent other people from--from seeing the content, the sender will have to encrypt it. Now, what happens is once you encrypt that content, it makes it much difficult to adapt that content for the final receiver.

People have said this is not possible to do. However we have looked at the problem, and with the technology we have invented here at HP Labs we have shown that you can solve this problem. That's pretty darn cool.

Susie Wee: We're actually building a prototype of a life-sized rich media environment that lets people communicate with each other visually in different locations as if they were in the same room. What we're doing is we're setting up life-sized displays so that people can see one another in full size. We're also letting people interact in very unconstrained ways. Unlike today's video conferencing, we're letting people move around the room, collaborate over documents that they happen to be looking over. And the way we're doing that is by using many cameras in the room and using video processing to figure out the best scene to capture and communicate to the other side.

One thing we're doing is working on making this lower-cost, easier to set up, so that you can actually set this up freely wherever you are. We've been on a 10-year journey to make end-to-end visual communications a reality.