

# ng Connect: The Shape of Things to Come

Fourth-generation mobile technology has the potential to change the way people use the Internet.

By Masha Zager ■ *Broadband Communities*

Imagine a restaurant table on whose surface you can play a video game, using your phone as the controller, while you wait for dinner. Imagine a car that, when it senses trouble, automatically calls a mechanic and downloads a fix. Imagine a store where you try on clothing and see yourself in a “mirror,” even though you’re still at home. Or a connected camera that quickly and securely uploads professional-grade photos and videos from anywhere.

These are just a few of the services being developed by members of ng Connect, a partnership of media and technology companies founded in 2009 by Alcatel-Lucent.

The Internet user experience has already undergone several major transitions. The walled gardens of early Internet services gave way to the wide-open vistas of the World Wide Web. Broadband transformed a text-based experience to a graphical and then a video-based experience. Mobile broadband (along with smartphones, tablets and app stores) gave users new targeted and easy-to-use tools.

Now ng Connect is determined to take the app revolution to the next level and beyond by maximizing the potential of 4G mobile networks.

## 4G = BROADBAND EVERYWHERE

Though Sprint and Clearwire started the 4G revolution in the United States

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*Imagine playing video games on a restaurant tabletop, using your cell phone as a controller ... or trying on clothes in an online store and seeing yourself in a “mirror” on your iPad.*

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several years ago, their initial effort was limited in scale. Now, as Verizon Wireless, AT&T Wireless, LightSquared and others also begin rolling out fourth-generation mobile networks across the country, high-speed mobile services are reaching critical mass.

Jason Collins, VP of emerging technology and innovation at Alcatel-Lucent, notes that, for the first time, millions of people will have essentially equivalent Internet service wherever they are – at home or on the go. The goal of ng Connect is to leverage that development.

Today, ng Connect has 65 members from all parts of the technology ecosystem – infrastructure, devices, applications and content. Giants such as HP, Samsung and Intel are represented alongside such start-ups as TuneWiki (which makes social music apps) and Gamify (which provides cloud-based game mechanics for Web-enabled systems). Twelve new members were added just this summer.

Collins says, “We’re trying to create an ecosystem of members where the sum is greater than the parts.”

## BRAINSTORMING CONCEPTS

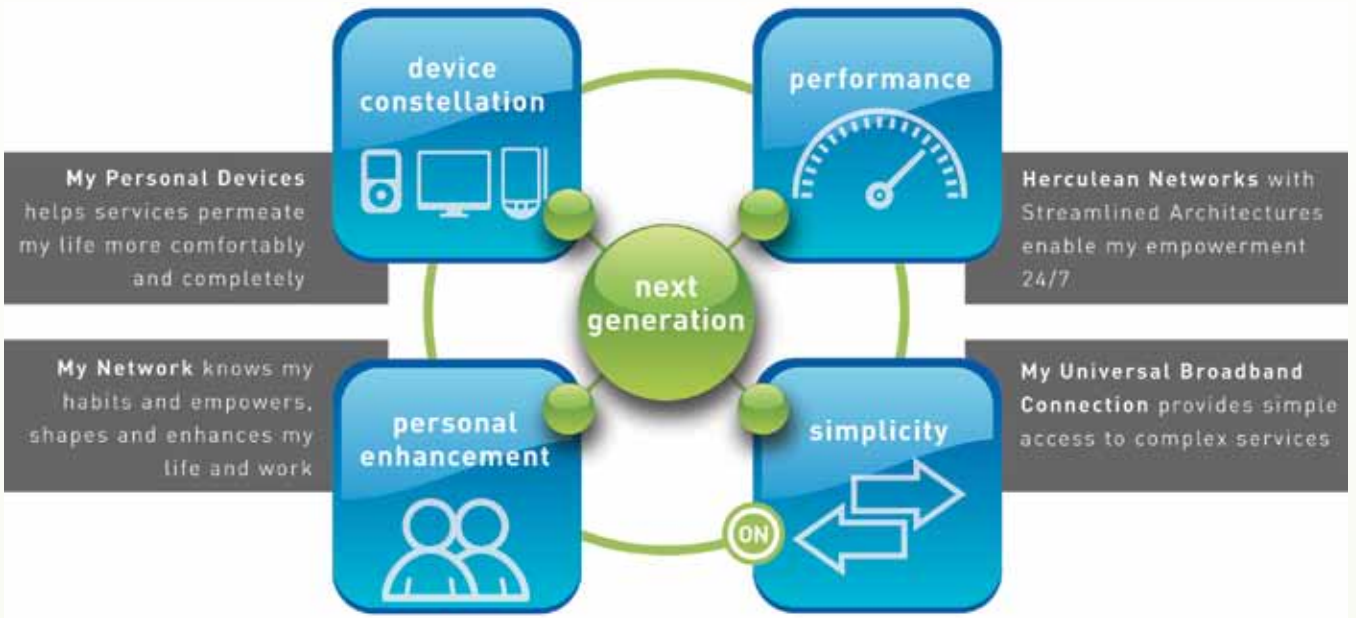
The members of ng Connect develop “service concepts” rather than commercial offerings. They meet in groups several times a year to brainstorm about the types of services possible with 4G mobile broadband. After that, it’s usually up to service providers to turn those ideas into reality. Both AT&T and Verizon have LTE innovation centers that work closely with ng Connect.

“What the service providers are trying to do is be more agile in service delivery,” Collins explains. “They typically take ... a year or two to go from a service concept to deployment. Their innovation centers are about ... making things happen faster than before, pulling the time from concept to reality to three to six months.”

Collaborating with service providers is important, Collins says, because their network capabilities are critical to the success of many services being discussed. Available bandwidth is only one of those capabilities. Others may range from handset battery life to the method used for handling location information.

### About the Author

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The ng Connect Program vision for next-generation services

**BUSINESS MODELS AND TECHNOLOGY**

The brainstorming and innovation that ng Connect facilitates have as much to do with business models as with technology. Many Internet companies developed great technology or applications first and hoped business models would follow – a strategy that succeeded wildly in some instances (think Google and Facebook) and not at all in others. The ng Connect program takes a more methodical approach in hopes of increasing the success rate.

“Technology is interesting, but it will not get deployed unless there’s a good business model,” Collins says. “Once you figure out the business model, the technology will accelerate. It opens up options so the technology can move fast.”

“Take the connected camera. Reporters spend a lot of money on the editorial process and getting pictures in place. There’s an opportunity to offer a more customized and higher-quality service to news organizations and, in return, get a monetary payback and a new business model that didn’t exist before.”

“As a service provider, you would offer a specialized service to reporters who wanted to take high-quality photographs. You’d offer a preemptive quality of service – letting the reporters get ahead of the queue of people uploading to Facebook. The newspaper would pay

a little more money for you to manage that and provide a service-level agreement appropriate for that application.”

A service provider might even offer a full cloud-based editorial package through which reporters could upload their photos and videos to a cloud-based service and editors could then review, select, edit and approve the images.

In such an example, because the application and service would be com-

binced and the quality of service guaranteed, neither the reporter nor the editor would have to be concerned about the bandwidth or other network resources required or used. Collins says, “By coupling customized, cloud-based middleware with their network capabilities and managing that as a whole, there’s a big uptick on the amount of revenue that can be generated. ... Service providers can move up the value chain.” ❖