What’s the sound of a planet talking? A century ago, the answer was simple: people conversing in person or over wired networks. Today, it’s not just everyone, but also every other thing, in constant motion.

An estimated two billion people will be on the Web by 2011 — and they’ll be doing more than talking. Video on demand, IP television and Internet TV will account for nearly 90% of consumer IP traffic by 2012. When people talk, it will be to many more people — via social networking sites, whose memberships will top 500 million in the next three years.

Consider that 10,000 security cameras in London are connected to the Web, feeding it video 24 hours a day. Or take the 350 connected sensors on a bridge in Minnesota, add the 800 monitoring another in Hong Kong — and multiply by the millions of roads, bridges and buildings in cities around the world. Now add billions of intelligent phones, cameras, cars and appliances, and millions of miles of smart power lines and roadways.

Is it any wonder that in just three years, IP traffic is expected to total more than half a zettabyte? (A zettabyte is a trillion gigabytes — or 1 followed by 21 zeroes.)

A smarter planet will require a smarter communications infrastructure. High-speed broadband, as important as it may be, doesn’t make a network smart. We need the network to be multidirectional instead of point-to-point. Smart networks must be infused with advanced analytics and intelligence, so they can identify connected, instrumented things and collect relevant data from them. They’ll have to be built on a foundation of standards and software that allow trillions of devices and objects to “talk.” And we’ll need next-generation digital platforms on which telecom providers can create and deliver all kinds of services.

Fortunately, smarter communications are at hand. India’s leading private telco is using IBM’s digital platform to deliver new services dynamically to hundreds of millions of people. A U.S. hospital is applying a pervasive wireless infrastructure, bar coding and RFID to manage its assets and administer medications — helping to increase both patient safety and operational efficiency. A network operator in Taiwan is offering customized advertising based on subscriber purchasing patterns — while individual subscribers of one Chinese telecom provider are collaborating directly with the company to create new services. And a university in California worked with IBM on North America’s first wireless parking solution to be integrated with payment stations.

A thinking, communicating planet will spur advances in everything from science and medicine, to business and technology…to possibilities not yet imagined…and will help billions of people join the global economy. When things communicate, systems connect. And when systems connect, the world gets smarter.

Let’s build a smarter planet. Join us and see what others are thinking at ibm.com/think.