

World Knowledge Forum 2013

Peggy Johnson - What is Next in Mobile?

During the 2013 World Knowledge Forum, the President of Global Market Development for Qualcomm Technologies, Inc., Peggy Johnson, discussed the growth in the mobile industry as well as potential areas for technological innovation moving forward.

With over 20 years of experience in the information communications technology sector, Mrs. Johnson has not only seen her company grow from 300 to over twenty-seven thousand employees, she has also witnessed the birth and growth of mobile. "Mobile is independent of age, of socio-economic status, of region. Everybody is connected," she said. Citing the fact that there are currently over 6.7 billion mobile connections, Mrs. Johnson explained, "The gap is closing very, very fast. When you think about that, the entire world is going to be connected over the next several years."

From a historical perspective, Mrs. Johnson noted that the first connectivity for most of the world will be through their mobile devices. "They will never know what it means to not be plugged in," she said.

This constant connectivity is currently being leveraged into new ways to create consumer value as well as improve quality of life around the world. She demonstrated this growth by noting that "forty-one percent of the dollars flowing in the VC [venture capital] world are going into mobile," and mobile patents have grown from two percent of all patents in 1991 to twenty-five percent of all patents last year.

Based on this growth and opportunity for innovation, Mrs. Johnson noted that there are three interesting phenomena taking place: the redefining of computing, the need for one thousand times more data capacity on networks, and the development of a digital sixth sense.

Due to the proliferation of mobile devices and mobile technology, Mrs. Johnson predicts that "the power that will be in our hands is going to be unrivaled compared to what we used to have on desktops." She referenced the problematic blue screens commonly associated with early PCs as something that is unacceptable in mobile.

As a result of this rapid advancement in computing, Mrs. Johnson predicts that data consumption will double each year for the next ten years, forcing network capacities to grow in tandem. Using

sports as an example, she stated, "Ten years ago, if you were in a football stadium, a single cell site delivering about 10 megabits per second used to suffice. Today, in that same stadium, one person can consume 10 megabits per second. They're sending videos, sending pictures, connecting to social media. They're bringing that cell site to its knees."

Mrs. Johnson continued, "When you put a smart phone in someone's hands, they use fifty percent more data."

Not only will the data that consumers send and receive increase, it will also be intensified by what Mrs. Johnson called "the internet of everything." She highlighted the transference of smart technology beyond mobile devices to everyday objects such as household appliances. "But how do you get the TV to talk to the refrigerator?" she quipped. "That's a problem we have to solve."

In addition to smart appliances, Mrs. Johnson believes that augmented reality will be able to help create a "digital sixth sense." Augmented reality is the ability for a mobile device to recognize its surrounding environment and augment or supplement the environment with data. To explain this, she used the example of a mobile user inside a shopping mall. The user's sister is a golf fanatic, and her birthday is near, Mrs. Johnson said. The phone can recognize the user's location and send a birthday reminder and notification of an ongoing sale at the golf store as the user happens to be nearby. This, Mrs. Johnson said, is "just information that my phone knows."

Mrs. Johnson sees this sixth sense as a way for users to receive "a bucket of relevant data, rather than a tsunami of data."

Aside from the three phenomena that Mrs. Johnson observes taking place, she also noted three ways in which mobile is transforming the daily lives of people worldwide. She highlighted the story of an Indian fisherman who was able to double his daily income by utilizing a smartphone to identify ideal fishing locations, as well as the best markets to sell his catch. She also explained that a doctor was able to utilize a smartphone application to perform an EKG while on an airplane. What's more, Mrs. Johnson spoke of a high school teenager who struggled with mathematics and utilized an educational app to engage with math beyond the classroom. The student scored a ninety-five percent on her state math test.

More and more people are, as Mrs. Johnson describes Qualcomm employees, "born native" to the communications landscape, as mobile continues to dominate.