

Internet for All. Really?

Akira Kamiya

VOCABULARY:

distributed system: coordinated computers that share resources, so that users perceive the system as a single, integrated computing facility

flaming: also known as bashing, is hostile and insulting interaction between Internet users

go viral: when an image, video, or link spreads rapidly because it is shared frequently

Internet backbone: large interconnected networks hosted by commercial, government, academic, and other high-capacity network centers

net neutrality: the idea that the Internet speeds should be the same for all content providers (For more on this topic, see p. 45.)

WiFi: the name of a popular wireless networking technology that uses radio waves to provide wireless high-speed Internet and network connections

In the Old Days: No Commercial Activities

Back in 1992, I worked for a technology start-up company that was making computer networking equipment for Macintosh computers. It was just the beginning of the Internet revolution, and companies were just starting to get involved in Internet networking. But nobody could have known what it all was about to become!

In those early days, the Internet was just a collection of maybe a few hundred military and higher education computers networked together to help with research and communication. It was all part of a big experiment to test a “**distributed system**” where information flowed across many lines instead of one.

One notable feature of this communication was that almost none of it was commercial. I remember one time someone posted on a forum that he wanted a particular computer part, and someone else responded that he had one that he wanted

to sell. Well, this was just not allowed! And the **flaming** response was heavy and quick. Back in those days there was even an official document stating the rules for using the Internet. Guideline #7 said, “Use for commercial activities by for-profit institutions is generally not acceptable.” Can you imagine that now?

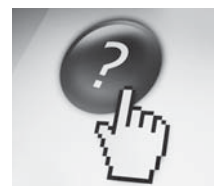
These Days: It’s All About Shopping

Currently, over \$1.25 trillion of business flows over the Internet through online purchases! Over 2.5 billion people use the Internet, worldwide. They are doing things like research, collaborating, watching video, getting in discussions, looking for work, shopping, and oh, more shopping! The rate of growth has been extraordinary as technology has gotten faster and cheaper year after year. Now millions of people are able to communicate one-to-one. And more importantly, we can also communicate one-to-many and many-to-many, without anyone filtering the information.

Could the Internet Be The Great Leveler?

The Internet has also broken down the traditional barriers between the producers and the consumers that the Television industry was built on. No longer is it only the rich and corporate making the programming content! Nowadays, any teenager with some know-how, imagination, and a message can make a video, post it on YouTube, have it “**go viral**” and reach millions of viewers! In this way, the Internet has the potential to level the playing field. Anybody with a Twitter account can publish his or her ideas, organize for change, and mobilize others to join in.

Unfortunately, the story of the Internet has not turned out to be a happy one where the rising tide lifts all boats. A couple of things have happened along the way that have made universal access still just a dream. The National Science



Foundation, which had responsibility for coordinating administration of the **Internet's backbone**, was forced by circumstances to amend the Acceptable Use Policy as it became clear that rapid growth was overwhelming the existing wires of

Unfortunately, the story of the Internet has not turned out to be a happy one where the rising tide lifts all boats.

the Internet, and they needed a way to make quick money to fund more rapid development of it.

First in 1994, the U.S. government *gave* control of the backbone to a handful of private companies.

Many "**net neutrality**" advocates criticized this move. They wanted the resource to be auctioned off, so that the money could be used to improve access and equity.

Once the access points to the backbone were in private ownership, it wasn't long before they figured out that selling access to high speed backbone was going to be a profitable venture! So if there is money to be made, which do you wire up first? The poor neighborhoods in Springfield and Roxbury? Or do you go to the affluent areas of Brookline and Boston? Now 30 years into this initiative to bring high speed internet access to the country we can see that many areas and groups of people have been left out. The United States now ranks 15th in broadband users per inhabitants.

Many rural locations and areas with predominantly low income people are still underserved.

And there is no real Federal initiative to fix this.

What Can Be Done?

The public could put pressure on Federal Communications Commission (FCC). We could demand that the FCC champion the cause of Universal Internet Access. We could also support private initiatives for this cause. For instance, in Boston "**FreeBostonWiFi**," a program to offer free Internet access at street pay phones is currently rolling out on a trial basis. This group of companies is working with Boston officials to offer over 400 "hotspots" by the end of next summer! They are also considering adding service in low-income areas of Boston where some people cannot afford their own Internet access. One official said, "We really want to make sure this is not just clustered in one spot." The initial roll-out will mostly include the downtown business districts and hotel areas. Its priorities are skewed, but it's a start!

Also on a national level, ten advocacy groups recently launched the Open Wireless Movement to promote the use of free, open WiFi networks. These groups argue that widespread wireless Internet access would benefit users and lead to new technological innovations. Organized pressure from citizens can help open up the Internet for all, but it's going to take constant steady work!

Sources: OECD Broadband Statistics, December 2011; <www.bostonfreewifi.org>.

Akira Kamiya is a Computer Field Technologist at the Adult Literacy Resource Institute in Boston, MA.

Fact vs. Opinion

List some facts from this article in the left column and the author's opinions on the right.
