THE BATTLE OVER NET NEUTRALITY

What kind of Internet user are you? Do you primarily use the Net to do a little e-mail and look up phone numbers? Or are you online all day, watching YouTube videos, downloading music files, or playing massively multiplayer online games? If you're the latter, you are consuming a great deal of bandwidth, and hundreds of millions of people like you might start to slow the Internet down. YouTube consumed as much bandwidth in 2007 as the entire Internet did in 2000. That's one of the arguments being made today for charging Internet users based on the amount of transmission capacity they use.

If user demand for the Internet overwhelms network capacity, the Internet might not come to a screeching halt, but users would be faced with very sluggish download speeds and slow performance of YouTube, Facebook, and other data-heavy services. (Heavy use of iPhones in urban areas such as New York and San Francisco has already degraded service on the AT&T wireless network. AT&T reports that 3 percent of its subscriber base accounts for 40 percent of its data traffic.)

Other researchers believe that as digital traffic on the Internet grows, even at a rate of 50 percent per year, the technology for handling all this traffic is advancing at an equally rapid pace.

In addition to these technical issues, the debate about metering Internet use centers around the concept of network neutrality. Network neutrality is the idea that Internet service providers must allow customers equal access to content and applications, regardless of the source or nature of the content. Presently, the Internet is indeed neutral: all Internet traffic is treated equally on a first-come, first-served basis by Internet backbone owners.

However, telecommunications and cable companies are unhappy with this arrangement. They want to be able to charge differentiated prices based on the amount of bandwidth consumed by content being delivered over the Internet. These companies believe that differentiated pricing is "the fairest way to finance necessary investments in their network infrastructures."

Internet service providers point to the upsurge in piracy of copyrighted materials over the Internet. Comcast, the second largest Internet service provider in the United States, reported that illegal file sharing of copyrighted material was consuming 50 percent of its network capacity. In 2008, the company slowed down transmission of BitTorrent files used extensively for piracy and illegal sharing of copyrighted materials, including video. The Federal Communications Commission (FCC) ruled that Comcast had to stop slowing peer-to-peer traffic in the name of network management. Comcast then filed a lawsuit challenging the FCC's authority to enforce network neutrality. In April 2010, a federal appeals court ruled in favor of Comcast that the FCC did not have the authority to regulate how an Internet provider manages its network.

Advocates of net neutrality are pushing Congress to find ways to regulate the industry to prevent network providers from adopting Comcast-like practices. The strange alliance of net neutrality advocates includes MoveOn.org, the Christian Coalition, the American Library Association, every major consumer group, many bloggers and small businesses, and some large Internet companies like Google and Amazon.

Net neutrality advocates argue that the risk of censorship increases when network operators can selectively block or slow access to certain content such as Hulu videos or access to competing low-cost services such as Skype and Vonage. There are already many examples of Internet providers restricting access to sensitive materials (such as Pakistan's government blocking access to anti-Muslim sites and YouTube as a whole in response to content it deemed defamatory to Islam.)

Proponents of net neutrality also argue that a neutral Internet encourages everyone to innovate without permission from the phone and cable companies or other authorities, and this level playing field has spawned countless new businesses. Allowing unrestricted information flow becomes essential to free markets and democracy as commerce and society increasingly move online.

Network owners believe regulation to enforce net neutrality will impede U.S. competitiveness by stifling innovation, discouraging capital expenditures for new networks, and curbing their networks' ability to cope with the exploding demand for Internet and wireless traffic. U.S. Internet service lags behind many other nations in overall speed, cost, and quality of service, adding credibility to this argument.
And with enough options for Internet access, regulation would not be essential for promoting net neutrality. Dissatisfied consumers could simply switch to providers who enforce net neutrality and allow unlimited Internet use.

Since the Comcast ruling was overturned, FCC efforts to support net neutrality have been in a holding pattern as it searches for some means of regulating broadband Internet service within the constraints of current law and current court rulings. One proposal is to reclassify broadband Internet transmission as a telecommunications service so the FCC could apply decades-old regulations for traditional telephone networks.

In August 2010, Verizon and Google issued a policy statement proposing that regulators enforce net neutrality on wired connections, but not on wireless networks, which are becoming the dominant Internet platform. The proposal was an effort to define some sort of middle ground that would safeguard net neutrality while giving carriers the flexibility they needed to manage their networks and generate revenue from them. None of the major players in the net neutrality debate showed support and both sides remain dug in.


**CASE STUDY QUESTIONS**

1. What is network neutrality? Why has the Internet operated under net neutrality up to this point in time?
2. Who's in favor of net neutrality? Who's opposed? Why?
3. What would be the impact on individual users, businesses, and government if Internet providers switched to a tiered service model?
4. Are you in favor of legislation enforcing network neutrality? Why or why not?

**MIS IN ACTION**

1. Visit the Web site of the Open Internet Coalition and select five member organizations. Then visit the Web site of each of these organizations or surf the Web to find out more information about each. Write a short essay explaining why each organization is in favor of network neutrality.

2. Calculate how much bandwidth you consume when using the Internet every day. How many e-mails do you send daily and what is the size of each? (Your e-mail program may have e-mail file size information.) How many music and video clips do you download daily and what is the size of each? If you view YouTube often, surf the Web to find out the size of a typical YouTube file. Add up the number of e-mail, audio, and video files you transmit or receive on a typical day.