CASE STUDY 5

NET NEUTRALITY

Few issues related to business use of the Internet have spurred as much heated debate as Net Neutrality. At the heart of the Net Neutrality debate is the idea that Internet access providers should not discriminate with regard to what applications an individual can use or interact with over the Internet. Advocates of Net Neutrality contend that individual freedom to use of the Internet extends to the content uploads or downloads. They also believe that individuals acquiring services from Internet access providers should be able to use the applications and devices of their choice, and be allowed to interact with the content of their choice anywhere on the Internet.

The concept of Net Neutrality is grounded in traditional "common carriage" concepts. Because carriers of goods, people, and information can be considered common carriers, common carriage concepts have been applied to trains, planes, buses, and telephone companies. Common carriage principles embody the ideal that the efficient movement of goods and information is essential to our economy, nation, and culture, and therefore carriers must not discriminate against or favor particular individuals or content.

If common carriers are truly public goods, it can be argued that these modes of conveyance should not discriminate with regard to what they carry or where they carry it. This also means that the carrier should not be held liable for carrying things that may be harmful. For example, if a terrorist

uses a subway to travel to the site of a terrorist act, the subway cannot be sued for being complicit in terrorism.

Telecommunication carriers have been classified as common carriers for more than 100 years, dating back to the early days of the telegraph. Nearly half a century has passed since the Federal Communications Commission (FCC) determined that the telephone network should be an open platform over which computer networks can be created. As a result of the Carterphone case, the FCC resolved that individuals had the right to attach devices of their choosing to the telephone network [BOSW12]. This opened the door for data communication devices such as fax machines and modems to be attached to telephone lines, thereby making it possible to create computer networks over the telephone network. In essence, court and regulatory rulings in the U.S. created an environment that fostered the idea that computer networks could be constructed to go anywhere the telephone network could take them using devices that could carry just about any type of content. The decisions made by courts and regulatory agencies that opened the door for telephone networks to carry data generated by computers were largely consistent with traditional common carriage concepts. However, the emergence of the World Wide Web and the increased popularity of broadband access that it generated added a new dimension to the Net Neutrality debate.

Because the Internet began its life as a computer network superimposed on national telephone network, Internet service providers (ISP) have not been subject to state or local telecommunications regulations. Instead, ISPs fall under the jurisdiction of the FCC which has traditionally viewed ISPs in the same way that it viewed telegraph and telephone service providers, that is, as carriers of information that is critical to our nation and society.

When the Internet evolved into a broadband network, it became a very different type of telecommunications network than the telephone or

telegraph network. This transition to broadband raised doubts about whether the Internet could continue to claim common carrier status. Net Neutrality advocates argued that broadband cable and DSL modems were nothing more than a new class of devices that individuals had the right to attach the telephone network. The FCC, however, was swayed by counter arguments and ruled that ISPs were information services that did not have to be shared and therefore would no longer be considered to be common carriers.

Because common carriers are not liable for damage caused by what they carry, the issue of the Internet as common carrier is central to the Net Neutrality issue. If a liability waiver cannot be extended to the broadband Internet and ISPs, is it possible for the Internet to continue in the form to which we are accustomed? If the Internet is not a public good, how should it be regulated and how much regulation is needed?

Strong arguments can be made both for and against Net Neutrality. Some of the more common arguments on both sides of the issue are summarized in Table C4.1. For example, Net Neutrality proponents claim that Net Neutrality is the reason why the Internet has been one of the nation's most important drivers of economic innovation during the last two decades. They also claim that the government's "hands off" stance has enabled the Internet to be used to encourage democratic participation and to promote free speech. They argue that our right to use any type of equipment, content, application or service without interference from the network provider or government should be protected.

Some Net Neutrality advocates think that legislation is needed to ensure the continuation of the Internet in its traditional "anything-goes" form. They contend that regulation is needed to ensure that average citizens are not abused by monopolistic and greedy corporations or that Net Neutrality legislation is needed to help control fraud and illegal activity. Others counter that regulation will lead to censorship and the stifling of free speech.

Table C5.1 Net Neutrality Pros and Cons

Pros	Cons
NN provides non-discriminatory access.	Tiered access could make for a better Internet.
Regulation is needed to ensure that Internet will have guaranteed access to whatever they want to read, listen to, or watch online; without regulation, large telecom companies could block or censor things they don't like without consequence.	Do we really need more legislation? There are numerous laws regulating Internet content and use and NN legislation is unnecessary.
Innovation and creativity are the heart of Net Neutrality; this gives users more options.	Regulation could stifle innovation and retard the evolution of Internet products and services.
Net Neutrality provides a competitive marketplace; NN regulation is needed to ensure that it stays this way.	Regulation is a futile exercise; none of the service providers would sabotage rivals by blocking their content or degrading network performance.
NN is consistent with historical communications policies.	NN is a new concept that has no history or historical precedence.
Everyone pays for their Internet connection so the costs of Internet infrastructure improvements are shared among users and providers.	Content providers responsible for generating significant Internet traffic are getting a free ride.
Government control of the Internet will ensure there is no monopoly and ensure that big Web sites will not dominate the market place.	Other networks function properly without anyone being in charge of them.
Regulation will help curb illegal activity and fraud.	Regulation would result in increased censorship and invasion of privacy.

The companies who provide the circuits for the public Internet have been spending a lot of money trying to convince Congress and the FCC to limit Net Neutrality. AT&T, Comcast, Time Warner Cable and Verizon would like to have the ability to charge Web sites for using their circuits based on the volume of traffic that the Web sites generate [SAVE12]. These carriers argue that content providers, such as Google, who are responsible for huge volumes of Internet traffic, should be willing to pay more for using carrier circuits. After all, many content providers are making billions in profit each year for using their circuits without being asked to contribute to the maintenance and advancement of the Internet's infrastructure.

The carriers advocate the creation of a tiered tariff structure for content providers with those that generate the most traffic paying the highest tariffs. In such a scheme, Google would pay extra to ensure fast transmission speeds while less popular content providers would pay less, or nothing at all. Carriers say that this arrangement would be similar to the extra tariffs that trucking companies pay to use interstate highways and other roadways. Because their big trucks cause more wear and tear on the roads, trucking companies are required by law to pay extra tariffs to help government agencies cover the costs associated with public highway maintenance.

The suggestion that heavy users should pay more for heavy usage of the Internet does not sit well with those who feel that Net Neutrality should be maintained. Net Neutrality advocates argue that the carriers want to get rid of Net Neutrality in order to put themselves in positions where they could serve as Internet gatekeepers. The carriers, they claim, want to be able to control which Websites and applications can go fast, which go slow … or can't be accessed at all. They also argue that the infrastructure providers want to set themselves up to be able to discriminate in favor of their own applications, content and services and to have the ability to slow down or block competitors' services. Small businesses and start-ups, they argue, will

never have a chance to make it big or strike it rich if the carriers are successful in limiting Net Neutrality.

Not surprisingly, many content providers have lined up in opposition to legislation to limit Net Neutrality. Carrier arguments for a tiered tariff system, however, have been convincing to some content providers, including Google [WHIT10]. Many well-known heavy hitters, including Amazon, eBay, Intel, Microsoft, Facebook and Yahoo are supporters, of Net Neutrality. Other groups that favor Net Neutrality include the ALCU, the American Library Association, the Christian Coalition for America, and Moveon.org. Editorial boards at some of the nation's major newspaper including the *New York Times*, the *Los Angeles Times*, the *San Francisco Chronicle*, the *Seattle Times*, and the *Christian Science Monitor* have also urged the FCC and Congress to protect Net Neutrality [TIME10].

There is compelling evidence for the notion that Net neutrality has been a guiding force that has helped the Internet evolve to the point it is today. The Internet has grown at a phenomenal pace since its being opened for commercial activity in the early 1990's, and one wonders if this growth would have taken place in the absence of the protections and freedoms that Net Neutrality has provided. Innovative products from companies such as Google, eBay, and YouTube, may not have come into being without Net Neutrality. Their success has inspired start-ups and online stores to take risks with the hopes that they too will have the same chance to make it big.

The cable providers who have invested in the infrastructure that underlies the Internet also make a good case for the tiered access that they favor. It is difficult to refute their claims that the large content providers can afford to pay higher fees for Internet access or that heavy traffic generators should be asked to contribute more toward financing network improvements that will benefit both them and the average Web user.

In the U.S., Net Neutrality debates can easily get sidetracked by First Amendment rights to free speech and other individual rights issues. U.S citizens have gotten some satisfaction from the fact that Net neutrality has promoted access to the Web and the assurance its content will not be blocked, slowed down, or sped up depending who owns the circuits and access technologies.

Given the volume of Web space that the Net Neutrality debate has generated, it is quite clear that the arguments are far from over. While Congress may continue to sidestep the issue, it seems inevitable that it, the FCC, and the federal courts, will be forced to confront Net Neutrality. No matter what is decided, the debate is likely to continue.

Discussion Points

1. This case focuses on the Net Neutrality debate in the United States. Do some Internet research on international views of Net Neutrality and summarize how views of this issue differ within and across other countries.

3. The mobile Web has added a new dimension to the Net Neutrality debate. If mobile users can access the Internet through their smartphones, should Net Neutrality concepts be extended to include cellular networks and mobile service providers?

4. Do some research related to how Net Neutrality has contributed to Internet commerce and online economies. Is network neutrality essential for the continued expansion of online commerce? Why or why not? Justify your answer.

5. Do you think that Net Neutrality must be maintained to protect freedom of speech and/or preserve democracy? Why or why not?