The debate over regulation of the Internet may be one of the most important of our day. Companies that have invested billions in Internet infrastructure contend that they need the ability to manage their networks, prioritizing some content over others to maintain service, and charging for higher speeds.

Advocates of net neutrality see the Internet as a utility, essential for individual learning, working, civic participation and free expression, as well as economic competition and innovation – too important to have fast lanes and slow lanes, with the fastest speeds going to the highest bidder.

The debate intensified this year, when the Federal Communications Commission invited public comment on new proposed regulations that stop short of the standards demanded by net neutrality advocates. The call elicited 3.7 million comments, as well as a storm of debate on Twitter and an avalanche of press coverage. Subsequently, President Barack Obama aligned with net neutrality supporters, but the new rules remain to be written.

The technical complexity of Internet regulation, and lack of direct historical precedent, make it difficult to engage the public in an informed debate and develop regulations that will remain effective over time. To tackle these challenges, both policymakers and citizens need to better understand public opinion, amid a torrent of organized advocacy from both sides. Knight Foundation partnered with Quid, a data analytics firm, to separate the signal from the noise.
The Federal Communications Commission regulates interstate and international communications in the United States and its territories. Its issuance of an order in 2010 aimed at preserving the open Internet precipitated a lawsuit by telecommunications company Verizon. This year an appeals court vacated portions of the order, setting the stage for the FCC to draft new rules and invite public comment.

Internet service providers and telecommunications companies provide the means—the pipelines—that connect the Internet to homes and businesses. They invest in cable and wireless networks that facilitate access and seek to recoup those costs and generate profits by providing services to the public and other customers. They include companies such as AT&T, Comcast, Verizon and Time Warner Cable.

The public uses connections provided by Internet service providers and telecommunications to access the Internet, which provides global links to family, friends and services.

Startups rely on the open Internet for offering services to customers; pay-to-play regulations that give preferential speed to established companies would inhibit competition.

Technology companies provide services and content to the public. They depend on Internet service providers and telecommunications companies for delivery. They include companies such as Amazon, Google and Netflix, which all deliver entertainment and media to the public.
ANALYZING THE DEBATE

Here are some of the broader questions the analysis raises:

• What is public sentiment related to net neutrality?
• How has net neutrality been covered in the media and discussed on social media? What has influenced the conversation?
• How are organizations and companies attempting to influencing the net neutrality debate?

Quid conducted the following research on net neutrality:

• **Media analysis** of more than 35,000 news sources and 300,000 blogs from January to July 2014.
• **Twitter analysis** of 120,000 tweets with #NetNeutrality from July to August 2014 and from #InternetSlowdownDay.
• **Comment analysis** of about 1 million public filings to the Federal Communications Commission.
• **Lobbying analysis** of approximately 2,500 filings from 2009 to the second quarter of 2014 from the U.S. Senate Lobbying Disclosure Act Database.
• **Grant funding analysis** of data for media access and telecommunications companies.
Public opinion was overwhelmingly pro net neutrality. The main narratives expressed on Twitter and FCC comments favored egalitarianism and fairness: Don’t create an Internet of haves and have-nots; treat the Internet like a utility, available for all. Net neutrality was also seen as essential for start-ups to succeed against established companies.

Telecom and cable companies chose lobbying over public debate. They appeared to make only limited efforts to sway public opinion through traditional or social media, instead pouring significant amounts of money into lobbying. Their main narrative focused on the enormous bandwidth used by content providers such as Netflix, who should not get a “free lunch” from companies that have invested billions in building networks.

Male and urban voices were overrepresented in the debate. As for the media, it covered the debate as a tech story and as a political story; local communities were not engaged.
MEDIA COVERAGE OVER TIME
Spikes in news coverage coincide with announcements by the Federal Communications Commission. Over time, more voices have joined the conversation.

Net neutrality news volume from Jan. 1 - July 18, 2014

Unique article count
350
300
250
200
150
100
50
0

- Court issues ruling in favor of Verizon, net neutrality now in question
- FCC releases draft rules, includes fast lane Internet
- FCC votes to move forward with new rules, public outcry
- Tech companies send letter to FCC, supporting net neutrality
- FCC announces plans to draft new regulations
- Netflix CEO Hastings calls for net neutrality
- FCC extends public comment period
- John Oliver segment goes viral, crashing FCC website
A TECH STORY, A POLITICAL STORY, BUT NOT LOCAL NEWS

Net neutrality was more likely to be covered in media outlets focused on technology or politics, rather than financial or local news.

News volume by source type, top 200 sources Jan-July 2014

Net neutrality vs. random sampling of news

Note: Other includes sports, entertainment, blogs, magazines, video games and other sources
The Players: Companies on both sides of the net neutrality debate were prominently mentioned in news reports.

Top 15 companies by count of mentions:

- Netflix: 3,839
- Google: 3,533
- Comcast: 3,455
- Verizon: 3,330
- AT&T: 1,802
- Facebook: 1,730
- Time Warner: 1,421
- Amazon: 1,222
- Twitter: 1,204
- Apple: 687
- Microsoft: 569
- Free Press: 385
- Hulu: 353
- Yahoo!: 290
- Reddit: 245
The Influencers: The leading voices cited in news reports favored net neutrality. During the analysis period, President Obama was frequently criticized for his absence from the debate. However, in November he weighed in with a strong statement and video in support of net neutrality.

Top 15 people by count of mentions*

- Barack Obama: 1,104
- Reed Hastings: 504
- John Oliver: 372
- Tim Wu: 327
- Al Franken: 302
- Jessica Rosenworcel: 282
- Mignon Clybump: 246
- Craig Aaron: 238
- Ajit Pai: 233
- Julius Ganachoswki: 207
- Edward Snowden: 189
- Michael Powell: 169
- Neelie Kroes: 137
- Mike Weinberg: 136
- Anna Eshoo: 120

*Tom Wheeler is omitted as he is present in ~3,500 articles surrounding net neutrality
Demographics overview: The readership of media outlets covering the net neutrality debate skews to a wealthier, male audience, with no age bias.

*Demographic data obtained from a random week of news from July 12 to July 18, 2014*
A central narrative during the period analyzed was that net neutrality stimulates innovation, helping startups compete against established companies. @Kickstarter, for example, tweeted to its 868,240 followers that “When we launched Kickstarter we didn’t need to negotiate a deal for access to the Internet fast lane. We just plugged in. #NetNeutrality”

Advocates of net neutrality were dominant on Twitter. While some shared news and education stories on net neutrality, significantly more tweets analyzed led to advocacy sites, which generally offered templates to submit comments to the FCC.

Women were again underrepresented in the debate. Twitter users from metro Boston, Los Angeles, New York, San Francisco and Washington, D.C., were overrepresented in the conversation.

Based on an analysis of tweets from July to August 2014.
Retweets: Top retweets relate to calls to action, with some commentary and education interspersed

<table>
<thead>
<tr>
<th>Top tweets by retweet count</th>
<th>User</th>
<th>RT</th>
<th>Favorites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable’s trying to end #netneutrality &amp; break the internet for profit. 36 hours left to stop em <a href="http://t.co/YM">http://t.co/YM</a> ... <a href="http://t.co/53">http://t.co/53</a>...</td>
<td>Tim Berners-Lee</td>
<td>6,165</td>
<td>1,799</td>
</tr>
<tr>
<td>Last chance to save #NetNeutrality <a href="http://t.co/dj">http://t.co/dj</a>.... #cablecompanyfuckery /PLS RT! PLS RT! <a href="http://t.co/bM">http://t.co/bM</a>...</td>
<td>Cory Doctorow</td>
<td>2,711</td>
<td>608</td>
</tr>
<tr>
<td>Your future without #NetNeutrality: <a href="http://t.co/R...http://t.co/MV">http://t.co/R...http://t.co/MV</a>...</td>
<td>BitTorrent, Inc.</td>
<td>2,540</td>
<td>2,026</td>
</tr>
<tr>
<td>A lot more people would become passionate about Net Neutrality if we renamed it Operation Porn Freedom</td>
<td>Kumail Nanjani</td>
<td>1,963</td>
<td>2,001</td>
</tr>
<tr>
<td>Net neutrality explained: <a href="http://t.co/o">http://t.co/o</a>...</td>
<td>George Takei</td>
<td>1,429</td>
<td>1,190</td>
</tr>
<tr>
<td>US Web Companies Press Demands for Net Neutrality With FCC - #TechTongue #Tech #Mobile <a href="http://t.co/b">http://t.co/b</a>...</td>
<td>Tech Tongue</td>
<td>1,357</td>
<td>21</td>
</tr>
<tr>
<td>Why the FCC is ditching net neutrality: <a href="http://t.co/bM">http://t.co/bM</a>... <a href="http://t.co/W">http://t.co/W</a>...</td>
<td>Mother Jones</td>
<td>1,286</td>
<td>363</td>
</tr>
<tr>
<td>FCC Net Neutrality deadline extended to Friday <a href="http://t.co/P">http://t.co/P</a>... <a href="http://t.co/TU">http://t.co/TU</a>...</td>
<td>Cory Doctorow</td>
<td>1,238</td>
<td>501</td>
</tr>
</tbody>
</table>

Note: Tweets with at least 1,000 retweets in July and August 2014.
**Gender:** Women tweeted less than men on net neutrality.

**Twitter geography:** The top metro areas are driving much of the conversation on Twitter.

### #NetNeutrality Twitter network

<table>
<thead>
<tr>
<th></th>
<th>Metro</th>
<th>Non-metro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual</td>
<td>69%</td>
<td>31%</td>
</tr>
<tr>
<td>Expected</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

### General Twitter network

<table>
<thead>
<tr>
<th></th>
<th>Metro</th>
<th>Non-metro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Expected</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

1. Based on sample of 20,000 tweets from July 9, 2014 – Aug. 20, 2014.
2. Top metros are defined as the New York, Boston, DC, LA and San Francisco areas, and location is based on user input when signing up for Twitter.
Commenters on the Federal Communications Commission site overwhelmingly favored net neutrality, according to Quid’s sentiment analysis of 1.1 million of the the 3.7 million comments submitted. Many individuals took the time to write — unique comments, as opposed to form emails or advocacy templates — accounted for 40 percent of those analyzed, much higher than the typical 10 to 20 percent.

The largest clusters of comments had the following themes:

• There is strong legal ground for reclassification of Internet service providers as Title II common carriers
• The FCC should reject the proposed fast and slow lanes on the Internet
• Internet service providers already have monopolistic power

There were anti-net neutrality responses as well, but the only one common enough to register was from a template.
THEMES OF PUBLIC COMMENTS

Individual comments were overwhelmingly pro-net neutrality and quite diverse, though the idea that the Internet should be reclassified as a common carrier for regulatory purposes was central.

Based on Quid’s analysis of 11 million comments submitted to the FCC. Each node represents a group of similar, unique comments. Comments from templates have been omitted.
TOP PARTICIPATION RATES BY STATE

Many of the unique comments came from Washington, D.C., which was proportionally overrepresented based on its population. The Southeastern United States, however, was underrepresented.

Comments count based on sample of ~300,000 comments. State of comments based on user input address. Expected population based on 2013 projected Census data.
Large Internet service providers, such as Verizon, Comcast and AT&T have largely avoided the public debate, instead seeking influence through lobbying, spending more than $238 million on filings that mentioned the term “net neutrality” at least once, according to the Quid analysis.

Advocacy groups, particularly pro net neutrality groups, concentrated their outreach through Twitter, using impassioned language to call people to action. These groups have sought to encourage people to submit FCC comments, often even providing templates that break down into three areas:

- Protect the diversity of the Internet: 24 percent (of the templates submitted)
- Schedule public hearings before making a decision: 14 percent
- Reclassify Internet service providers to allow more regulation by the FCC: 14 percent

The only significant anti-regulation template (4 percent) advocated not reclassifying ISPs.

Netflix also has been one of the leading advocates for net neutrality, with its CEO Reed Hastings being a vocal supporter. It has had an effect on the public conversation, with 5 percent of media about net neutrality surfacing around Hastings’ criticism of Comcast and Verizon. The ISPs have responded, saying Netflix shouldn’t expect anything for free, but that is the rare representation of Internet service providers attempting to sway public opinion in the media.
**Corporate strategies:** In lieu of trying to sway public opinion, corporations are largely focusing their efforts on lobbying.

<table>
<thead>
<tr>
<th>Type</th>
<th>Example Corporation</th>
<th>Lobbying $s</th>
<th>Influence strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telcos</td>
<td>Comcast</td>
<td>$83M</td>
<td>Comcast focused on lobbying, but has recently pushed through corporate announcements and advertisements to promote their own open internet philosophy.</td>
</tr>
<tr>
<td>Telcos</td>
<td>National Cable and Telecommunications Association</td>
<td>$12M</td>
<td>The NCTA is the face of the telecom companies, and has promoted both Google &amp; Twitter ads to push their interests.</td>
</tr>
<tr>
<td>Telcos</td>
<td>Verizon</td>
<td>$100M</td>
<td>Verizon has focused entirely on lobbying and has made few announcements or public efforts to influence the conversation, except for a few quotes from spokesmen.</td>
</tr>
<tr>
<td>Tech Cos</td>
<td>Netflix</td>
<td>$0M</td>
<td>Netflix has used CEO Reed Hastings to prominently argue for net neutrality while criticizing ISPs. Netflix has made streaming deals with all major ISPs for direct access to their networks.</td>
</tr>
<tr>
<td>Tech Cos</td>
<td>Google</td>
<td>$53M</td>
<td>Google has largely remained in the shadows of the conversation besides signing on with 100 tech companies in support of net neutrality. Recently, they launched the ambiguous “Take Action” showcasing the need for a free and open Internet.</td>
</tr>
</tbody>
</table>
Pro-Internet service provider dollars dwarf spending for both pro-net neutrality lobbying and grants. Lobbying spending peaked in 2010 and 2011. The FCC issued its open Internet order in 2010.

Lobbyist dollars, top 20 clients over time (millions)
2009-2013

Pro – Expedia, Level 3, Dish, Microsoft, Google, AOL
**Lobbying spending**: Telecommunications company focus on lobbying to push their interests. Some technology companies, such as Google are becoming more active.

**Lobbying spending on filings with at least one ‘net neutrality’ issue**

Q1 2009 - Q2 2014

![Bar chart showing lobbying spending on net neutrality issues for various companies from Q1 2009 to Q2 2014. The chart compares companies on the y-axis and their spending on the x-axis. The chart highlights companies like Verizon, Comcast, AT&T, Google, Recording Ind Assn of America, NCTA, Viacom, Time Warner, Charter Communications, Expedia, Inc., National Music Publishers Assn., Broadcast Music, Inc., Writers Guild of America, Microsoft, Level 3 Communications, AOL Inc., Dish Network, Hughes Network Systems, Frontier Communications, and Tekelec. The chart also indicates which companies are pro-net neutrality and against regulation.]
**Top advocacy organizations:** Top advocacy groups have a significant and active presence on Twitter and created FCC templates to push their interests.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Number of followers</th>
<th>Number of tweets*</th>
<th>Count of templates</th>
<th>Pro/Anti regulation</th>
<th>Website language</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFF</td>
<td>232,000</td>
<td>20</td>
<td>84,438</td>
<td>Pro</td>
<td>*Pay-to-play: Internet stifles innovation. These practices pose a dire threat to the engine of innovation.</td>
</tr>
<tr>
<td>Daily Kos</td>
<td>165,000</td>
<td>0</td>
<td>50,844</td>
<td>Pro</td>
<td>The Internet thrives because it is an open and free marketplace of ideas. Big Telecom will create a “pay-to-play” system that will unfairly favor large corporate websites.</td>
</tr>
<tr>
<td>FFTF</td>
<td>50,800</td>
<td>238</td>
<td>11,800</td>
<td>Pro</td>
<td>Battle for the Net: Team Cable vs. Team Internet</td>
</tr>
<tr>
<td>TechFreedom</td>
<td>8,671</td>
<td>54</td>
<td>N/A**</td>
<td>Anti</td>
<td>If anything is going to slow down the Internet, it’s Title II, the mess of outdated and heavy-handed rules that have been coflated with net neutrality.</td>
</tr>
</tbody>
</table>

*Number of tweets from Aug. 18 to Sept. 17, 2014 containing #netneutrality, net neutrality, #openinternet or Open Internet

**TechFreedom’s template was launched after the 1.1M comments were collected
KEY QUESTIONS

Quid’s analysis unveils the prevailing narratives and influencers shaping the net neutrality debate. It raises several provocative questions about the future of the open Internet and policy decisions:

• The public voice that has participated in the conversation has overwhelmingly supported net neutrality. How will that affect the final decisions made by the Federal Communications Commission and political leaders?

• The net neutrality debate has been dominated by men and a handful of major metropolitan areas. Since the voices of women and much of the country have not been equally represented, how will this affect the conversation and the policies that emerge? Should efforts be made to bring more voices into the conversation?

• What impact will lobbying have on the future of the open Internet, especially given that more money is devoted to lobbying against net neutrality?

Perhaps most important, we as a democratic society must consider how rules and regulations either protect or restrict our freedoms. At Knight Foundation, we believe that democracy thrives when people and communities are informed and engaged. What are the actions that get us closer to that ideal?
Knight and the Open Internet

Quid’s analysis is part of Knight Foundation’s commitment to supporting the free flow of information. Knight supports transformational ideas that promote quality journalism, advance media innovation, engage communities and foster the arts. We believe that democracy thrives when people and communities are informed and engaged.

We first convened a panel to explore the issue of digital access in 2008: the Knight Commission on the Information Needs of Communities in a Democracy. A year later the commission released a report “Informing Communities: Sustaining Democracy in the Digital Age,” with recommendations that were largely adopted by the Federal Communications Commission in its own report, “The Information Needs of Communities: The Changing Media Landscape in a Broadband Age.”

More recently, the first Knight News Challenge of 2014 asked, How can we strengthen the Internet for free expression and innovation? Knight received 704 entries in the challenge, an open call for ideas, and in June awarded almost $3.5 million to 19 projects. The conversation continued in August during the 2014 Forum on Communications and Society at Aspen Institute where thought leaders explored how Internet regulation would help or hurt the potential of this resource.

knightfoundation.org