

Kneecapping the Future: Comcast's Unjustified Internet Caps and the Plan to Kill Video Competition

Comcast recently announced major modifications to its so-called “excessive use” policies for Internet users. The company scrapped its 250 gigabyte (GB) per month usage cap, and said it will trial new 300 GB monthly allotments in two markets. The trials come with steep overage fees of \$10 as soon you exceed this arbitrary cap. These changes followed the uproar over Comcast’s decision to exempt from the cap its own “Xfinity” streaming video on the Xbox while subjecting competitors’ streaming video services like YouTube and Netflix to the cap.

Comcast tried and failed to portray the 300 GB trial and hefty overage penalties as a pro-consumer removal of the caps in all but the test markets. But in truth they’re just the company’s latest move to protect itself against the disruptive threat posed by emerging online video competition. Comcast’s exemptions for its own traffic, followed by its clumsy suspension of caps for most users, illustrate one undeniable truth: There are no legitimate engineering or economic justifications for these caps. But Comcast’s new Internet overcharging scheme and its discriminatory treatment of competitors’ video offerings do pose a grave threat to future video competition.

- **Comcast’s caps are not necessary to deal with any potential network congestion**
 - Comcast calls caps a network-management tool but previously admitted the purpose of the caps is not to deal with congestion.¹ That’s the role of Comcast’s real-time, localized FairShare network-management tool, which addresses congestion when and where it actually occurs on the network.
 - Exempting all Xfinity-Xbox traffic from the monthly caps, even though this data travels over the same exactlast-mile infrastructure, conclusively proves that Comcast has no congestion problems or economic issues that caps can legitimately address. If a customer can use the Xbox to view as much Xfinity content as she wants, she should be able to watch content from a different source too.
- **By temporarily lifting caps for most markets, Comcast has proven it has no need for caps**
 - The fact that almost all Comcast customers will live in a world with no caps for the next several months demonstrates that the caps have no engineering purpose. It’s not as if we should expect to see rolling broadband blackouts in the absence of the caps. If the caps are not needed to deal with congestion for the next few months, why bring them back at all?
- **Comcast is abusing its power in the broadband market to protect its legacy cable business**
 - The new overage fees ensure that for most users, the monthly cost of replacing traditional cable TV with online alternatives will be too high. If TV Everywhere’s authentication model is Comcast’s bet against cord cutting, these new caps and overage fees are the company’s hedge against that bet.
 - Caps like these, which have no legitimate engineering or economic purpose, distort markets through economic discrimination. Used to discourage consumers from using competitors’ services, these unjustified limitations restrain innovation and competition, ensuring the continued dominance of the incumbent’s preferred business model.
- **Comcast’s profits are growing, while its network costs are declining**
 - The broadband business is a great one for Comcast: Revenues and profits are increasing while operating costs and capital investments are declining.
 - There’s simply no legitimate economic reason for these new overage fees. Comcast’s motivation here is to deliver users just enough value to justify the increasing monthly cost for broadband service, but not enough to encourage users to cut back on or eliminate Comcast’s main cash cow: pay television service. Indeed, though Comcast claims the Xfinity-Xbox offering is merely a cable TV service, users must subscribe *both* to Comcast’s cable TV service and its high-speed Internet service to access the content.

Comcast's caps are not designed to deal with hypothetical network congestion

While the Internet is not immune to congestion problems, instances of actual congestion are much rarer than the major ISPs let on, particularly on wired networks like cable broadband. Furthermore, to the extent that congestion does occur, it is a localized and temporary phenomenon that is best addressed with targeted, time-limited network-management tools, not with an overly blunt instrument like monthly usage caps.

In fact, Comcast itself has offered indisputable evidence that usage caps are completely unwarranted for congestion management. Comcast's cable modem network, like all cable providers' networks, is a shared "last-mile" resource. In theory, one or more users could negatively impact the performance of other users' connections during a "busy hour" period where there are more demands for bandwidth than the cable ISP is able to supply. While Comcast utilizes the FairShare technology to identify and manage such congestion, the company still justifies the monthly cap as a network-management tool because it discourages "excessive use."²

However, Comcast recently exempted its own Xfinity application from its caps when consumers view Xfinity content on the Xbox. In practice, this means a customer could watch Xfinity HD video streams around the clock without her activity counting against the monthly cap — even though the Xfinity video stream travels over the *exact same* shared last-mile infrastructure as all other Internet traffic. The Xfinity-Xbox traffic has the same potential to congest a local node as a Netflix stream, yet the Comcast-owned content is exempt from this supposed network-management tool. Thus, by exempting its own traffic from these caps, Comcast proves it has no network congestion problem that caps can solve. The monthly caps do indeed discourage excessive use, but only *certain* forms of use that Comcast deems excessive. Not surprisingly, Comcast thinks its customers' use of competitors' service is excessive, but that using Comcast's own service is fine.

By temporarily lifting the cap in all but two test markets, Comcast proves it has no need for caps at all

While Comcast experiments with its new Internet overcharging scheme in two test markets, it will suspend the monthly caps altogether for the vast majority of its subscribers. This move highlights the dubious nature of the company's data cap regime — if Comcast is perfectly capable of suspending these restrictions for the vast majority of subscribers for an indefinite period of time, why do the caps exist at all? Presumably Comcast customers won't be faced with rolling Internet blackouts in the non-test markets, so why would it need to foist an unnecessary and punitive cap/overage scheme on these customers in the future?

Comcast offers a typically evasive answer to questions regarding the underlying justification for data caps, saying the marketplace has "evolved" and it is looking to a more "consumer-friendly" approach to network management.³ Comcast Executive Vice President David Cohen went further, explaining the change was "a matter of messaging way more than it is a matter of capacity."⁴ The message Comcast is sending to its subscribers is clear: "Use only the services we provide online and no one else's." The need for a superficial change in messaging was prompted by the public backlash Comcast created through its preferential treatment of its own Internet video content — preferential treatment that violates Comcast's agreements with the Department of Justice and the FCC, which it made to secure its merger with NBCUniversal. But Comcast's recent changes to its caps serve only to magnify its discriminatory practices, and reveal that regulators were right to be concerned about Comcast's incentives to abuse its market power and thwart competition from online video.

Comcast is abusing its power in the broadband market to protect its legacy cable business

Cable companies like Comcast have long enjoyed a monopoly over multichannel programming services. It took several acts of Congress to get satellite video competition off the ground, but despite the limited increase in competition from these and the few large telco providers that offer video today, cable TV prices continue to increase exponentially. The recent emergence of over-the-top nonlinear video competition, which has taken a bite out of the stagnant, linear cable TV cartel's business, has caused a panic in the boardrooms of major vertically integrated companies like Comcast-NBCU that provide cable offerings and produce content. The larger cable/programming cartel is using authentication models like "TV Everywhere" to fight against cord-cutting

authentication regimes like “TV Everywhere” that limit content distribution on the Internet to cable subscribers. But even this tactic has not been enough to reverse the cord-cutting/cord-shaving trends.

So to hedge its TV Everywhere bet, Comcast is moving to this new caps/overage penalty scheme to ensure over-the-top video only complements its traditional cable TV service, and doesn’t compete against it. Comcast wants users to believe that their monthly broadband subscriptions are bringing them value, but not so much value that those customers feel compelled to do away with cable TV altogether.

The new overage fees strike that balance for Comcast by ensuring that for most users, the monthly cost of replacing traditional cable TV with online alternatives is too high. Comcast is using the caps and overages to create a sense of scarcity, but in reality there is no scarcity since its customers are permitted to stream Comcast’s IP video services as much as they like.

Comcast pays lip service to the open Internet by stating it wants its customers to feel free to use YouTube and Netflix and Hulu.”⁵ But with a monthly cap coupled with overage fees, that “freedom” to use alternative services suddenly becomes incredibly expensive for consumers, even as Comcast’s own costs for offering Internet access continue to decline. Imagine a customer who uses up her monthly data allotment before the end of the month. The next movie that she’d like to stream could either be free (if she uses Xfinity on Xbox) or it could increase her monthly Comcast bill by \$10 if she watches it on Netflix. This is the case even though the cost to Comcast to provide the video over Xfinity is likely *higher* than the cost it incurs to deliver a Netflix stream.⁶

The choice for the subscriber is an easy one in the short term, but one that harms her in the long run. She’ll almost certainly choose to save that \$10, and go with the “free” Xfinity service. Of course, consumers pay Comcast many times over for that supposedly free benefit, in the form of higher and higher fees for cable broadband and continued cable television subscription fees. Caps like those imposed by Comcast, which have no legitimate engineering or economic purpose, distort markets through economic discrimination. These unjustified limitations restrain innovation and competition, ensuring the continued dominance of Comcast’s preferred business model. Though Comcast claims that its Xfinity-Xbox service is merely an on-demand cable service, subject to Title VI of the Communications Act, consumers must subscribe to both Comcast’s cable service *and* its high-speed Internet service to access this content. This is a clear example of Comcast’s revenue-protection strategy in operation. This dual-subscription requirement demonstrates the falsehood in the notion that preferential treatment of Xfinity-Xbox content is based on its status as merely a cable television service.

Comcast’s profits are growing, while its network costs are declining

Comcast’s new overage fees are particularly egregious considering the fact that the company’s financials have never been better, as its own cost of doing business declines:

- Over the past five years, Comcast’s high-speed data customer base increased nearly 40 percent.⁷ Last year alone, Comcast added 1.2 million high-speed Internet customers and increased high-speed Internet revenues by 10 percent. This trend is due both to wider adoption of home broadband as well as Comcast increasing its lead on its telco competitors. In 2007, 27 percent of the homes Comcast passed subscribed to its Internet service. That figure increased to 34.5 percent by the end of 2011.
- The average monthly revenue Comcast collected from each residential high-speed Internet subscriber increased 5.3 percent over the last three years, rising to \$40.11 per month at the end of 2011.⁸ Comcast’s overall average revenue per subscriber increased 16.2 percent over the last three years, to \$137.43 per month.⁹
- Comcast has repeatedly raised prices on its broadband services over the past few years. In fall 2009, it increased cable modem rental fees 67 percent.¹⁰ A year later, modem fees were increased again by another \$2, along with a \$3 increase for standalone monthly Internet service.¹¹ In 2010, still more customers saw high-speed Internet fees increase by \$5 per month,¹² with yet another rate increase between \$2 and \$4 following less than a year later in late 2011.¹³

- Comcast's network investments have declined, even as the company began and completed upgrades to the DOCSIS 3 networking standard that enhanced Comcast's capacity and lowered its operating costs. From 2008 through 2011, Comcast's annual capital investments in its cable communications segment declined by 13 percent, from \$5.5 billion to \$4.8 billion. Comcast's relative investment in its cable communications segment declined from 17 percent of segment revenues in 2008 to 12.9 percent in 2011. Company wide, Comcast's capital investments as a percentage of revenue were cut in half over the past five years, from 19.8 percent in 2007 to 9.5 percent in 2011. Comcast has told investors to expect even lower capital investments in 2012.
- Comcast doesn't report profits by segment, but overall the company's net profits increased from \$2.5 billion in 2007 to \$5.2 billion in 2011, a period where Comcast's return on invested capital increased from 5.4 percent to 9.1 percent.
- Though Comcast doesn't disclose it specifically, analysts have estimated that Comcast's profit margins on broadband service are 80 percent or higher.¹⁴ In 2008, Sanford C. Bernstein & Co. analyst Craig Moffett estimated Comcast's data margins at 80 percent, and Credit Suisse reported in fall 2010 that Comcast's gross margins on high-speed data were 93 percent.¹⁵

Conclusion

Comcast is abusing its market power through the preferential treatment of its own Internet video services and its discriminatory application of its arbitrary and unjustified data caps. There is simply no legitimate engineering or economic justification for the cap itself, a fact made clear by Comcast's willingness to exempt its own services from the cap. Policymakers who care about consumers and competition need to pay close attention to how monopoly providers like Comcast implement data caps and overage fees. If these discriminatory practices become more widespread, the future of the video market will look bright for the legacy monopolists — but bleak for consumers and American innovation.

¹ "That cap does not address the issue of network congestion, which results from traffic levels that vary from minute to minute." See Attachment B: Comcast Corporation Description of Planned Network Management Practices to be Deployed Following the Termination of Current Practices. Available at http://downloads.comcast.net/docs/Attachment_B_Future_Practices.pdf.

² See "About excessive use of data," Comcast Customer Central (available at <http://customer.comcast.com/help-and-support/internet/common-questions-excessive-use>). See also Stacy Higginbotham, "Comcast Capitulates on Data Cap, but Dodges Net Neutrality," *GigaOM*, May 17, 2012. Available at <http://gigaom.com/broadband/comcast-capitulates-on-cap-but-dodges-the-net-neutrality-issue/>.

³ *Id.* See also "Comcast to Replace Usage Cap With Improved Data Usage Management Approaches," Comcast Voices, May 17, 2012. Available at <http://blog.comcast.com/2012/05/comcast-to-replace-usage-cap-with-improved-data-usage-management-approaches.html>.

⁴ John Brodtkin, "Comcast answers data cap questions," *Ars Technica*, May 17, 2012 (available at <http://arstechnica.com/business/2012/05/comcast-answers-data-cap-questions/>).

⁵ *Id.* Comcast of course owns a stake in Hulu, which recently was reportedly exploring a change in its open-for-all business model to require users to first authenticate they are a subscriber to a cable television service offered by companies such as Comcast.

⁶ Comcast has to pay content owners to stream their movies, yet nearly all of Comcast's transit arrangements with third party bandwidth carriers are either zero cost for Comcast (because of settlement-free peering) or actually generate revenue for Comcast through paid-peering arrangements such as the one it foisted upon Level 3 communications in 2010. Because both streams travel over the same last mile infrastructure, the fixed and variable costs incurred by Comcast are equal in the last mile.

⁷ Data reported in Comcast's annual 10-K SEC filings.

⁸ *Id.*

⁹ *Id.*

¹⁰ Todd Spangler, "Updated: Comcast Hiking Cable-Modem Fee to \$5 From \$3 Monthly Nationwide," *Multichannel News*, September 15, 2009 (available at <http://www.multichannel.com/article/353986-Updated-Comcast-Hiking-Cable-Modem-Fee-to-5-From-3-Monthly-Nationwide.php>).

¹¹ Tom Sowa, "Most Comcast prices going up," *The Spokesman-Review*, July 7, 2010 (available at <http://www.spokesman.com/stories/2010/jul/07/most-comcast-prices-going-up/>).

¹² Mike Rogoway, "Comcast hikes rates for Oregon cable TV, Internet access," *The Oregonian*, November 29, 2010 (available at http://www.oregonlive.com/business/index.ssf/2010/11/comcast_sets_annual_rate_hike_1.html).

¹³ Mike Rogoway, "Comcast raises Oregon rates for the second time in 2011," *The Oregonian*, November 22, 2011 (available at http://www.oregonlive.com/silicon-forest/index.ssf/2011/11/comcast_raises_oregon_rates_fo.html).

¹⁴ Vishesh Kumar, "Is it time to tune in to cable?," *Wall Street Journal*, April 3, 2008. "Comcast, for instance, has a profit margin of 55 percent in video but 70 percent in phone and 80 percent for broadband, estimates Bernstein's Mr. Moffett."

¹⁵ "Broadband Wars," Credit Suisse Equity Research, October 19, 2010.