

TOMORROWVISION



Inside:
The shocking truth
about the policy tweaks
that could help promote
online video!

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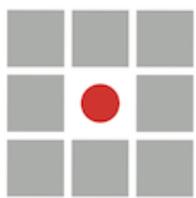
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The Elevator Pitch

What's wrong with TV? The shows themselves are better than ever, but the way that viewers watch and pay for TV is stuck in the past. To fix this, policymakers should take steps to increase competition in program distribution. After a few policy changes online video services should be able to compete head-to-head with cable and satellite TV, and this increased competition will allow TV to catch up with the innovation that has marked mobile devices, consumer electronics, and broadband Internet services over the past several years. In particular:

- ★The FCC should issue a declaratory ruling that multichannel video programming distributors (cable and satellite TV providers, or MVPDs) may not engage in “unfair methods of competition or deceptive acts and practices” with regard to online video distributors (OVDs).
- ★The FCC should begin a proceeding to determine which regulations ought to apply to OVDs that choose to operate as MVPDs themselves.
- ★Congress and the FCC should reform the law to allow MVPDs more flexibility in carrying broadcast signals.
- ★The FCC should open up device competition.

This paper will attempt both to diagnose why the TV marketplace is stuck with outdated distribution and business models and to explain why the above policies could be the fix it needs.



Introduction†

“TV is Broken.” The title of a recent blog post¹ by Patrick Rhone says it all. The author is a tech blogger whose home media setup consists of an old iMac that streams video from the Internet rather than a TV that plays shows from a cable subscription. The title refers to the reaction his 4-year-old daughter had when she used “normal” TVs for the first time while on vacation. She wanted to watch a movie but it would keep getting interrupted by commercials. Or, even stranger, she couldn’t find anything to watch at all.

Rhone and his daughter are part of a new cohort that is so annoyed by normal TV that they would rather do without it. They are not the snooty stereotypes, familiar for years, who would tell you that they would “rather sculpt or write in [their] journal or read Proust”² than watch TV. The odd thing is that while TV distribution is stuck in the stone age, TV programs are in a golden age. While there are many cord-cutters³ (people who have given up on subscription TV) and “cord never-havers”⁴ (in John Gilles’s words, “Cable’s Lost Generation”⁵), they want to watch the same programs everyone else does. As a matter of fact cord-cutters might watch plenty of TV programming—but on Netflix and Hulu and not cable. Or they might own a TV, but only use it when it is hooked up to a laptop. They just don’t want to deal with the hassle and expense

of a cable subscription that tethers them to the living room. Mobile devices and the broadband Internet have totally change the way they consume media and communicate in every area except TV.

There are many reasons why TV is stuck in a distribution and consumption model that has not significantly changed in decades—but they all boil down to a problem of incentives. The people who work in TV know that growing numbers of people, especially young people, are abandoning traditional TV, and they know that the industry has a poor reputation for innovation and value. They know that something will have to change eventually. But they are in business and nearly any change to the way the TV industry is structured could potentially hurt the bottom line of some combination of studios, broadcasters, or cable and satellite distributors—or all of them at once. Voluntary change to this industry is unlikely to come as long as some of the key players fear they may be the losers under some new regime. The industry is “caught in rights thickets, and slip[s] on muddy rules,”⁶and as a result, it cannot make the changes it needs to make to stay relevant to the next generation of viewers. To continue with these perilous metaphors, the industry needs to be pushed before it falls off a cliff.

The structure of the TV industry did not just happen by itself. It is the result of decades of public policy and regulation, some of it well-intentioned and some of it the result of rent-

Yesterday's Business Models, Today

seeking, with good effects and bad. Whether these regulations are a net plus or a net minus for society, they're undoubtedly complex, and when some look at the ungainly mass of regulations that govern the TV industry they are tempted to just scrap the whole lot of them.⁷ But this would come at a cost. Not only could too-rapid deregulation be chaotic (people could, for instance, lose access to programming), but it could simply allow the few companies that benefit most from the current system to withhold programming from competitors and take other actions that are illegal today, perversely making a pro-consumer evolution of the TV marketplace less likely.

Thus, rather than recommending hasty deregulation, hoping that the industry comes to its senses, or having faith that some future "disruption" will make the entire matter obsolete, this paper suggests ways that already-existing public policies can be tweaked to force the market to evolve. The purpose of these policy changes is not to extend and update the existing media regulation paradigm so that it continues indefinitely into the future. Rather, this paper proposes policies that are like training wheels that should eventually come off. A properly-structured TV marketplace should not require constant micromanagement. But we have to achieve this proper structure first.

The TV industry today is a cumbersome but powerful machine. Since commercial broadcasting's start in the 1920s, the industry has evolved, but it has never been disrupted—new technologies (such as cable, and now the Internet) are just brought into the fold. They extend and enhance incumbents but do not replace them.

The TV marketplace is a creature of government, and it is full of policies that are designed to divvy things up among a few players. Broadcast licenses are scarce commodities, fiercely protected by the lucky few that have them. Cable and satellite providers are subject to rules that prevent them from supplanting broadcasting, and themselves are the beneficiaries of exclusive licenses and franchise agreements that insulate them from competition. Broadcasters themselves have an obligation to negotiate with each cable operator that wants to carry their signals. They are also forbidden from competing in other broadcasters' markets by having a cable system in another city carry their signals. Cable operators are required to share any programming they create with each other, and with satellite operators. These arrangements sometimes put different industry players at odds with each other, but the result is that they are all assured viable, ongoing businesses. Any changes to this system require either regulatory changes, or the cooperation of nearly every player in the

industry. The industry as a whole is subject to a “tragedy of the anti-commons,”⁸ where the existence of multiple rightsholders, each of whom must buy into any voluntary change, prevents the market from evolving toward a more efficient state. Instead of hoping that the players somehow come to their senses, the rules need to change.

The Original Sin of Media Policy

This system began with a series of federal policy choices in the 1920s and 1930s to bring order to the airwave. These had the effect of discouraging competition and experimentation in radio broadcasting, and broadcast licenses were restricted to “respectable” (or powerful and politically-connected) outfits, primarily for commercial purposes. By controlling who gets a license, and for what purpose, the government short-circuited the natural evolution of the broadcasting medium.⁹ Soon after the government began to decide the rules of radio, the broadcasting landscape was dominated by “chains” (or “networks”) of stations, which broadcast the same programming nationwide. Today’s TV networks and independent stations are the beneficiaries of a system first designed to reduce the anarchy on the airwaves. In exchange for these favorable laws, broadcasters began to portray themselves as quasi-public institutions, serving the general good. Then, for decades, they were able to use this role as justification for regulations that protected them against competitors.

Cable, the Disrupted Disrupter

The most significant of the potential rivals to broadcast was cable TV. Left alone, unregulated cable operators may have developed into a powerful alternative to broadcasting, distributing their own content as well as improving the quality of over-the-air signals. Instead, cable became an extension of broadcasting, as aggrieved broadcasters prevailed on the FCC and Congress to pass a series of measures to make sure that cable systems merely extended the reach of broadcasters without supplanting them.

This is a complex story and it’s true that policymakers have shifted the focus of their attention over time. For example, they have gone from treating cable like a threat, to partially deregulating it with the Cable Communications Act of 1984, to partially re-regulating it with the Cable Television Consumer Protection and Competition Act of 1992. But while the balance may change, the overall structure does not—cable systems work to extend the reach of broadcasters rather than to compete directly with them. A number of regulations govern how they can carry broadcast content. For example, “good faith” rules require broadcasters to fairly negotiate the rates they charge cable operators, and “must carry” rules *require* that cable systems carry the signals of any broadcasters that demand it. Various other rules like “syndicated exclusivity” give broadcasters territorial rights to content over and above what

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they could obtain through private contracts, and the “program access” system is designed to keep any one cable system from having content exclusives.

The Video Guild System

On balance, policies like this tend to lock different actors in the TV marketplace into particular roles, keeping out outsiders (such as potential online video providers) and keeping change at bay. As a result, television is structured less like a modern competitive industry and more like a medieval guild system where everyone has a place. The industry is ridden with empowered middlemen and operates like a super-cartel that keeps prices high, technology backwards, and business models stagnant. This is not because of some master plan: Rather, there are simply too many intermediaries between the content creator and the viewer, and they each take their cut. For example, some the most valuable programming is still found on network TV. Networks hire creators to make this programming for them, and then pass it along to affiliate broadcasters. Affiliates then pass it along to cable systems, which together with their cousins, satellite and telco-delivered Internet Protocol television (IPTV, which encompasses such systems as AT&T’s U-verse and Verizon’s FiOS TV but does not include “pure” Internet video like Netflix), are known as multichannel video programming distributors, or MVPDs.

Since the majority of people access programming through MVPDs, the primary purpose of an affiliate’s broadcast signal is to

grant the company certain legal and business advantages and to situate them as “broadcasters” in this complex delivery system;

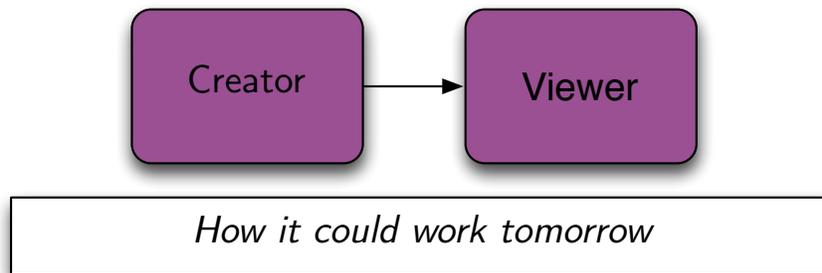
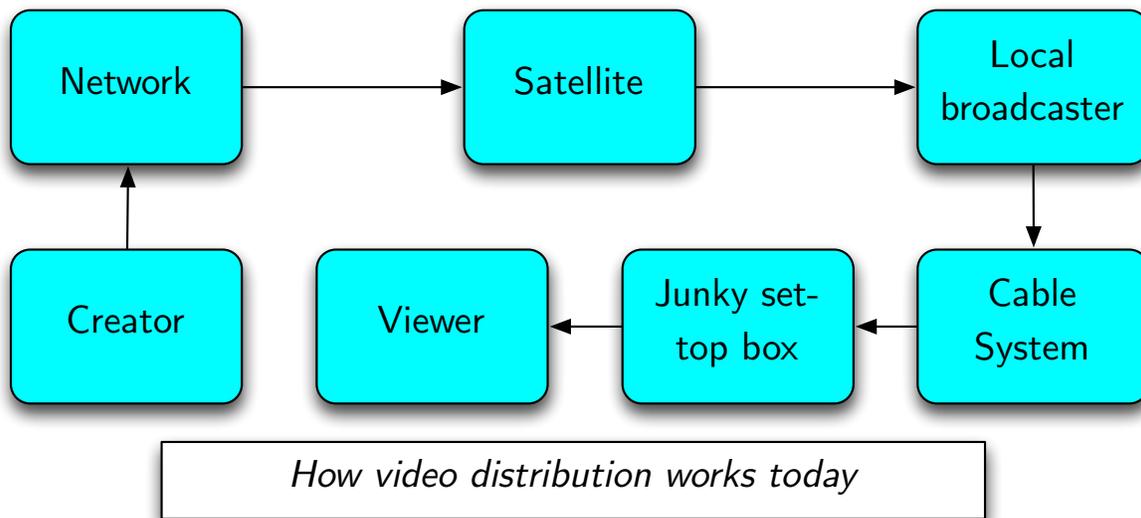
A pocket guide to how business models become laws
<i>Must-carry</i> rules mean that any broadcaster can demand to be carried on cable.
<i>Network non-duplication, distant signal, and syndicated exclusivity</i> rules given local broadcasters territorial exclusivity.
<i>Retransmission consent</i> rules mean that MVPDs must pay to carry free, over-the-air TV, but at least are protected by “good faith” rules during negotiations.
Cable systems must <i>carry broadcast signals on the basic cable tier</i> , which means that all their customers must pay for them.
<i>Program access</i> rules prevent MVPDs from having anti-competitive exclusives.
The <i>compulsory copyright license</i> gives MVPDs the right to retransmit programming after getting the permission of broadcasters, instead of negotiating with actual content creators.
Broadcasters only exist because of the gift of <i>free use of the public airwaves</i> .
Cable operators get <i>free use of public land</i> to run their cables.

relatively few people watch the actual broadcast signal. (In fact, broadcasters generally value

their MVPD viewers more than their over-the-air viewers, since MVPD systems pay for the right to retransmit broadcast signals. MVPD viewers thus both see advertising and represent an indirect source of retransmission fees.) A typical delivery chain for a single program thus might be: Programmer → Network → Affiliate → Cable.

brought to court by programmers for copyright violations. But these are all fights for relative advantage within the system—few if any MVPDs or broadcasters have tried to change the system itself.

As a whole this system serves the multiple layers of content distributors much more than



To be sure, the different players in the industry don't always get along. Cable systems and broadcasters squabble over retransmission payments. Different MVPDs battle over access to programming. Cable systems have even been

creators and viewers. Its outdated nature can perhaps be most clearly seen in the geographic assumptions it makes. Why is Fox or ABC programming carried on a different “channel” in each local market instead of on a national signal like Fox News or ESPN? Why do cable systems

operate in geographic fiefdoms (Philadelphia is a Comcast town, while Time Warner Cable gets Los Angeles¹⁰) when online video services like Amazon Prime and Netflix operate nationwide? These geographic assumptions are the technological and business model equivalents of vestigial tails.

The Consequences of an Obsolete Model

Negative consequences of the outdated and rickety TV distribution system are found throughout the media landscape. Broadcasters squander airwaves that could be used for wireless broadband, smartgrid energy systems, or unlicensed consumer devices. Non-broadcast channels are used as bargaining chips between networks and cable operators, and MVPD channel lineups reflect corporate agendas more than viewer demand. Consumers pay ever-rising rates as MVPDs pass along the extortionate fees that broadcast channels demand for “retransmission.” MVPDs extend their control of the last-mile distribution pipe right into the home, via set-top boxes that restrict how subscribers can access the content they pay for. Limited and inconvenient distribution contributes to online piracy, which in turn leads to calls for draconian enforcement regimes and bandwidth controls. The economics of the industry encourage, if anything, further concentration: the simplest way for a cable system to cut down on costs is to make its own programming and buy its own broadcasters. It is

a strange “market” where retransmission fees, one of the fastest-growing expenses in a cable operator’s budget, did not even exist until after Congress created them in 1992. Given that Congress actively chose to increase the price that cable operators must pay for independent programming, it is not surprising that more and more production has moved in-house.

These problems are all the result of middlemen who take advantage of the regulatory system to put their own needs above those of content creators and viewers. This is not to say that middlemen are the problem per se. In every kind of industry, middlemen can serve a valuable role. In creative industries they can put up capital, act as talent scouts, navigate promotion and distribution opportunities, and filter and bundle content for their viewers. But when there are too many middlemen, they become more like toll-keepers and less like matchmakers. Middlemen should add value, and not merely control access to some distribution bottleneck. And the particular problem of the TV market is that each middleman has a stake in the industry as it stands and the power to keep it from changing.

The industry incumbents today have financial muscle and a lock on viewers, which by themselves are enough to secure their position. Creators have to deal with the industry as it is, and distribute their programming through existing channels. Viewers then have to go to

where the programming is. This cycle is very powerful. But it is not merely their size and historical advantages that keep TV middlemen in power. They have set up a legal structure that operates in parallel to and reinforces their business arrangements—and serves to limit new competitors. At the same time, one set of middlemen, cable operators, also controls the broadband infrastructure that offers the best hope for an alternative model for TV distribution.

Creators and the public alike would be well-served if intermediaries did not have such tight control over the TV ecosystem. Creators should be able to reach viewers more directly and should not have to sign over so many rights to distributors. Viewers would benefit from being able to watch more, better content in the way they want to watch it and from not having to subsidize such an ungainly industry.

Making the TV Marketplace Benefit Viewers

This paper’s policy recommendations are designed to move the TV distribution system away from benefitting middlemen and toward benefitting viewers and creators. Briefly, it argues that the FCC should extend to online video distributors (OVDs) the moderately-successful current policies that prevent MVPDs from having programming exclusives or behaving anticompetitively toward each other. It proposes that the FCC should establish a framework for online services to operate as “virtual cable

systems,” which would allow them to enjoy some of the same benefits, such as statutory copyright licenses, that traditional cable systems enjoy. This would allow online services to have access to the “similar array of programming” the FCC has recognized they need to “fully compete against a traditional MVPD.”¹¹

Combined with open Internet protections, these policies could allow broadband to emerge as a viable, full-fledged competitor to old-line MVPDs. Their purpose is to promote competition and not constrain or control it, and to ensure that media regulation does not tilt the playing field against new technologies. In time, as a more robustly competitive market emerges, it may begin to naturally provide the benefits that previously could only be ensured through explicit public policy. Competition would keep prices low and quality high, and a potentially unlimited number of “channels” and programs covering all topics and catering to diverse interests would find a home. When this happens, Congress and the FCC could start rolling back rules that no longer serve a purpose. After all, the best way to avoid regulation is to no longer need it, and in the TV marketplace the way to achieve this is to promote broadband distribution of video as a competitor to MVPDs.

Why Video is Different

The Internet has revolutionized much of the information economy, from music to news to publishing. While the transition has been jarring for some long-established industries, it has been great for consumers. Today, consumers can access more, better content than ever before.

Ultimately everyone benefits from the online transition. Creators and media companies can sell to a large and growing market. Distribution costs are low and nothing ever goes “out of print.” Hits can reach millions and niche content can find an audience. Creators can charge for content or give it away for free—and consumers have demonstrated that, as long as content is available and reasonably priced, they will buy it.¹²

This revolution ought to be happening with online video as well. As the Justice Department noted, online video distributors (OVDs) “represent the most likely prospect for successful competitive entry into the existing video programming distribution market.”¹³ But this competitive entry seems less certain by the day, as TV and cable incumbents extend their reach online to eliminate the threat. While incumbent publishers and record labels were not able to stop the transformation of their industries, TV is different in a few key ways and has proved resilient to disruption. Broadcasters, programmers, and MVPDs are locked into a symbiotic relationship, protected by regulations and supported by business arrangements that

keep outsiders out. They control the wires that OVDs need to access viewers, and they use their clout to extract favorable terms from content creators. That is why, thus far, online video providers have mostly specialized in providing content that does not directly compete with MVPDs, such as on-demand movies, old TV shows, and out-of-market sports. To underline how they try to avoid colliding with MVPDs, many of them even take steps to keep consumers from watching their content on TV screens.¹⁴

Distributing video online seems to be a great way to bypass the physical barriers to starting a new broadcast station or cable system¹⁵—an online cable company should be able to deliver

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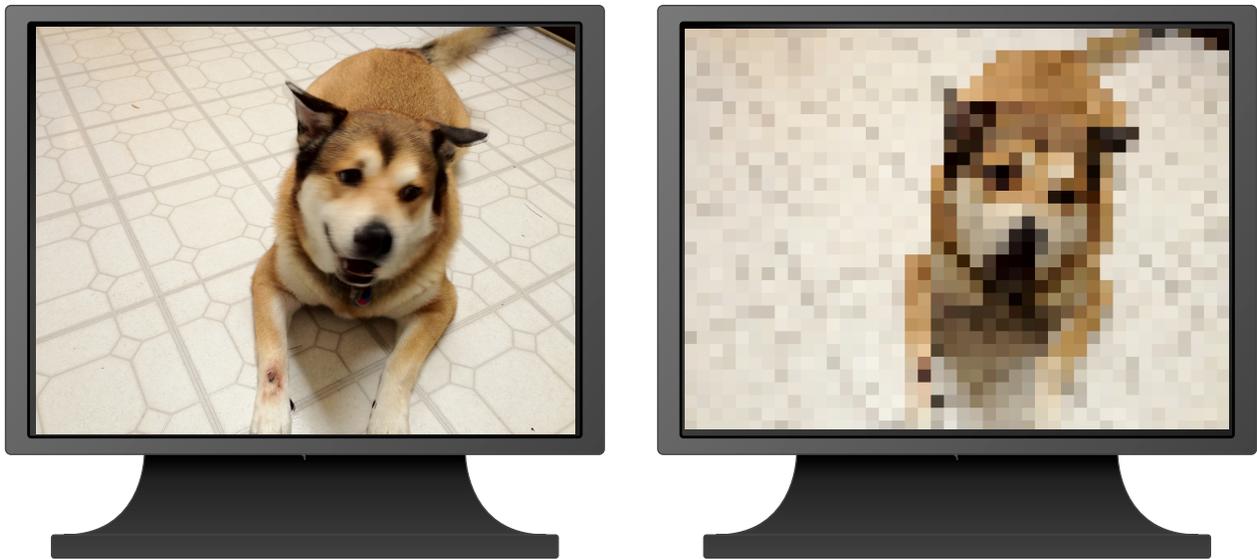
programming nationwide, bypassing the need for dedicated physical infrastructure, just as Amazon and iTunes became dominant media distribution platforms

without opening up physical stores. But business and regulatory barriers keep this from happening. As the largest buyers of video content, MVPDs are able to keep their suppliers from putting some content online. Broadcasters and MVPDs take advantage of of regulatory privileges, from “must-carry” (which guarantees a broadcaster a place on a local cable system’s lineup) to “program access” (which requires that MVPDs make their programming available to each other). Furthermore, there is no way for new entrants to avail themselves of the means that incumbents of all sizes have to protect against anticompetitive conduct. As a result, companies like ivi, Digital Broadcasting and Sky Angel that simply want to add competition to

existing markets and slot themselves into established categories, find themselves without legal recourse.¹⁶ To make matters worse, since many MVPDs are also broadband providers, OVDs need to depend on the good graces of their direct competitors, and the FCC's legally-uncertain Open Internet rules, to make sure they can reach their customers.

Traditional MVPDs are facilities-based:¹⁷ they own the wires their content travels on, and

hour full-length movie may be more than 1,000 times larger (in terms of the amount of computer storage space it requires) than an hour-long album. Video can therefore take more than 500 times longer to transfer from a remote computer to a home user than audio content of similar duration. For a while, Internet content providers got around this by simply presenting video at such a low quality as to be far from presenting a competitive threat to MVPDs. Only in recent years has it become possible to



Internet video, now and then

can better guarantee a certain picture quality. Until recently, it was difficult to distribute video on the Internet, where it has to travel over wires and infrastructure the provider does not control. Most consumers did not have broadband connections capable of handling video of reasonable quality in reasonable times until the past few years. Even compared with audio content, video requires a very robust broadband connection, with a lot of bandwidth.¹⁸ When both are presented in reasonable fidelity, a two-

“stream”¹⁹ high-quality video to a critical mass of Internet users. Compared with other media, online video has had a late start, and video incumbents, unlike their colleagues in other media, have had time to prepare for it.

The most popular providers of Internet access in the United States are cable companies, which have enjoyed decades of market power as the dominant providers of subscription TV service. They stand to lose if significant numbers

of customers “cut the cord” and access most of their video content online,²⁰ and therefore have an incentive to discriminate against online video.²¹ The ever-more-consolidated structure of the broadband access market gives them the means to do so, as well—large national residential ISPs are able to make demands on other parts of the Internet ecosystem (backbone providers, content services) that smaller ISPs never could. Finally, since they face little competition, cable companies have free rein to take discriminatory actions that annoy consumers, without much risk of widespread defection. This puts OVDs in a fragile situation, as MVPDs cripple or “monetize”²² video services that compete with their own legacy offerings.

Discrimination Against Online Video

For example, broadband providers can interfere with “net neutrality” by slowing content they do not approve of, or giving preferential “fast lane” access to their own content, or that of their business partners. This is as if your phone company cut special deals with all the pizza shops in your town, making sure that calls to Vinnie’s Pizza (which paid a special fee to the phone company) always went through, while calls to Pasquale’s were busy more often than not (even if Pasquale’s lines are not tied up). This is not mere speculation—Comcast, the nation’s largest cable company and broadband ISP, was sanctioned by the FCC for interfering with online video transfers, which compete with its legacy cable TV business. Again and again, broadband ISPs have

complained about the “unfairness” of a world where they sell Internet connections to their users, but those users go and find services on the Internet that make full use of the bandwidth they’ve paid for, or which compete with the ISP’s other lines of business. Most broadband ISPs want to live in a world where they get paid twice for every Internet connection—and are on the record saying so.²³ They would like their residential customers to pay them, but they would also like online services to pay them extra so they can be sure their services work right. But if broadband ISPs are allowed to decide whether new video services are permitted to reach viewers’ homes, they might choke off the online video revolution.

Billing Practices That Discourage Cord-Cutting

MVPDs cripple or “monetize” video services that compete with their own legacy offerings.

Another way broadband ISPs discriminate against online video is through pricing and bundling models. It is sometimes cheaper to buy a broadband connection along with a cable TV service than broadband alone—indicating that some cable companies will go through any accounting contortions to hide the decreasing customer interest in their products. But this can have a negative effect on competing online video providers: many customers will just watch the TV service they already have, rather than seeking out something new, and possibly better, online.

Data Caps or Usage Penalties?

Some broadband ISPs discriminate against online video (and other high-value uses of the Internet) in a new way: by charging unreasonably high per-megabyte rates for data, instead of offering more traditional flat rates. As a general matter, there is nothing wrong with customers paying different amounts for Internet access, with high-bandwidth users paying more and low-bandwidth users paying less. This can be a fair way to ensure that the costs of new network infrastructure (such as servers, lines, and peering costs) are borne by those who use the network most and who, at the margin, cause capacity constraints. Nor is there anything wrong with broadband ISPs using price signals to smooth out peak usage—a carrot-and-stick billing model could encourage some low-priority bandwidth uses, such as software updates, to happen overnight, rather than during peak after-work usage times. However, most metered pricing plans that have been rolled out bear little relation to real costs and are not tailored to manage peak usage. These plans are usually per-month usage caps with overage charges. More similar to fines than fees, these overage charges mean that users who go over their bandwidth allotment are subject to punishingly high bills. Because the caps apply to all Internet usage, not just usage at peak times, they do nothing to actually relieve network congestion, and seem designed to scare people away from watching too much Internet video. After all,

Independent programming providers are forced to enter contracts that prohibit them from making their programs available online.

traditional MVPD content is still all-you-can-eat.

Withholding Programming from Online Platforms

Cable broadband ISPs can also keep their competitors from having access to the content they need. It is as if the papyrus industry was able to keep wood pulp out of the hands of the upstart paper mills. They do this in a number of ways. First, cable companies that produce content themselves can simply withhold it from their competitors, or license it only on onerous terms. This is increasingly common.

Comcast just merged with NBC-Universal, bringing a major network, a motion picture studio, and the largest cable company and broadband ISP under the same corporate umbrella. Even tiny Cablevision creates its own television programming. Broadband and cable providers with an interest in valuable content can withhold it from online competitors, even though they are often forbidden by law from withholding it from competing cable or satellite companies. The unfairness of this is exasperating, especially when you consider that (all things being equal) content companies benefit from selling their products to more customers and reaching more viewers. But vertically-integrated content/conduit companies are often more interested in protecting their 20th century business models than growing their content businesses. The interests of creators and distributors, even within the same company, do not always align.

Kneecapping Independent Programmers

Second, as the largest buyers of some kinds of content, cable TV systems have an inordinate effect on what some of their suppliers— independent content companies and broadcasters —can do. The Comcast/NBC merger proceeding proved what was long common knowledge in the industry: that independent programming providers are forced to enter contracts that prohibit them from making their programs available online.²⁴

In what is practically a case study on how to use existing market power to squash upstart competition, cable companies in particular often play hardball with independent programmers²⁵ to extract various concessions, including blocks on online distribution. Although cable companies are technically not allowed to favor their own content over others', cable companies—especially the largest ones—will mutually favor each others' content, so a programmer that isn't affiliated with any MVPD is left out in the cold. And although it is illegal for any MVPD to try to keep a programmer from being carried by any other MVPD, the FCC has not yet declared it unlawful for an incumbent to require that a programmer keep its content off of online platforms. It goes without saying that these exclusive dealing provisions hold back the development of online video.

Programmers are unable to change this system by themselves. They are theoretically

protected by the “program carriage” rules administered by the FCC, but if one of them objects to discriminatory or otherwise illegal behavior, a cable company can resort to delay tactics and refuse to air the programmer's channels until the programmer gives in to its demands. Independent programmers must sometimes choose between letting their content go months or years away from the public eye or acquiescing to the demands of a powerful cable company. It is therefore not surprising they often acquiesce to whatever behavior the cable company thinks it can get away with. Compounding the problem, when the programmer then agrees to a less-than-ideal agreement with one cable company, it usually has to offer the same terms to the other cable companies it negotiates with through “most favored nation” clauses. Advantage thus begets advantage as incumbent video distributors use their life-or-death power over independent programmers, which is bad in itself, to starve online video platforms of the content they need to reach parity with traditional MVPDs.

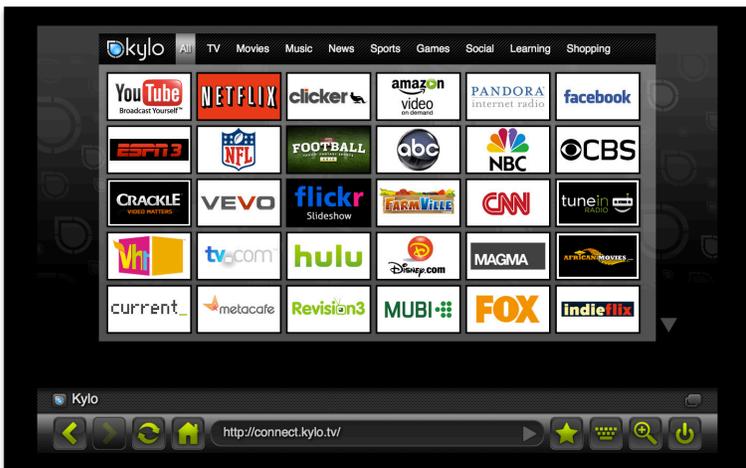
People would watch more online video if they could do so right on their TV, using the same device they use to watch their MVPD service.

Interfering with Websites and Devices

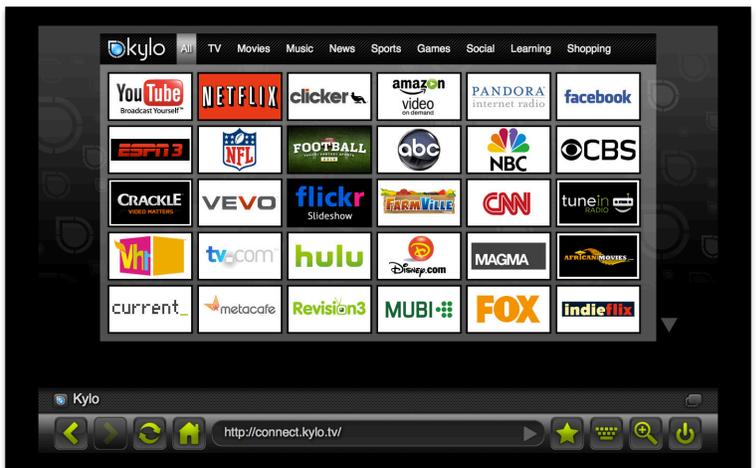
Finally, broadcasters and MVPDs play games with consumer electronics and websites to make it harder for average viewers to switch to online video. People would watch more online video if they could do so right on their TV, using the same device they use to watch their MVPD service. But by subsidizing proprietary devices

MVPDs limit the market for competitive video devices that might offer consumers more flexibility. Furthermore, MVPDs and broadcasters have rolled out products with anti-features that make watching video online at all, or watching online video on a TV screen, unnecessarily difficult. These products purport to respond to consumer demand for online video but seek to make the process as annoying as possible. For example, some cable operators have agreed to start putting content online, but require that consumers go through cumbersome

For example, Google TV devices are blocked from accessing Hulu, an online video service controlled by Comcast-NBCUniversal, Fox, and Disney-ABC. The Kylo web browser, which runs on a PC and works like any other browser, is also blocked because it is optimized to work on a TV screen. TVs and computer monitors are essentially the same technology today, but incumbents are exploiting their different histories and different consumer expectations to try to steer consumers away from replacing their cable subscriptions with online video.



What the Kylo browser looks like on a computer.



What the Kylo browser looks like on a TV.

authentication processes before viewing it.²⁶ This is pointlessly inflexible: why not allow people to purchase online-only subscriptions? And while some broadcasters put content online without tying it to a cable TV subscription, they often take technical measures to make it difficult to display the content on TVs. This is because simply putting content up unrestricted, perhaps with ads, would still undermine the network/affiliate relationship, as well as disrupt MVPDs, which pay broadcasters retransmission fees.

Another thing holding some people back from watching more online video is convenience—people want to watch video on the couch in front of their TV, not in an office chair in front of a computer. Most people do not want to attach a dozen devices with slightly overlapping functionality to the same TV, just to watch content online that might be available on cable to begin with. As Steve Jobs said, “The television industry fundamentally has a subsidized business model that gives everyone a

set-top box, and that pretty much undermines innovation in the sector.”²⁷ By keeping competing services away from consumers’ TV screens—by relegating online video to computer screens, basically—MVPDs are able to keep online video from becoming a true competitive threat.

The subsidized set-top box model is quite unusual. With other communications systems, there is a “right to attach,” particularly when it comes to networks (like cable systems) that run wires over public property, or that use public airwaves (like satellite TV). People used to have to rent their phones from the phone company, but the FCC put a stop to that practice in the 1960s,²⁸ and no one rents their computer from their ISP. Even mobile phones, which are so expensive that their up-front cost is subsidized, are owned by the consumer, can be “unlocked,” and can be used with different carriers. The unusual control MVPDs exert over how their customers use their networks has some pretty clear competitive effects—compare how few people use TiVo digital video recorders as compared with cable-provided DVRs. TiVo came first to the market and still offers a superior user experience, but cable companies make it much harder to set them up. Consequently most DVR just find it simpler to settle for whatever device their cable company offers, and innovation suffers.

Because of the obstacles the legacy media industries construct, many consumers find it too much of a hassle to watch online video on their TV sets. Online video might become more of a

true competitor to MVPDs if those obstacles were removed.



It is true that legacy industries are often upended by technological disruption. Kodak could not keep digital cameras from taking away its film camera business. Sony was unable to fend off the threats to its Walkman and Discman from the iPod. But the situation is different where, as here, a potentially disruptive industry finds itself at the mercy of incumbents, who use a decisive mix of business and regulatory tools to keep them at bay. In some ways, the ability of cable companies to suppress online video gives them more power over the future of communications than the country has seen since the monopoly telephone era. At least AT&T and its Bell operating companies had to behave as common carriers and refrain from interfering with the content of telephone calls. Today, the cable operators control the wires, and, in conjunction with their business partners in broadcast, the content. Very little stands in their way to exploit that control and continue dominating the market.

Policy Steps to Promote Online Video

Both Congress and the FCC have a role to play in updating the law to promote video distribution competition. Many laws already on the books are broad enough that, if the FCC

chose to use them to protect online video, or to reform others in pro-competitive ways, it could do so. Others would require Congressional action. This section will briefly note the major steps these institutions can take to support online video.

- ★ The FCC should issue a declaratory ruling that MVPDs may not engage in “unfair methods of competition or deceptive acts and practices” with regard to OVDs.

Congress has determined that the public interest is best served by competition between video distributors. But experience in the U.S. and comparisons to overseas video markets have shown that video competition does not happen on its own. Left to itself, the video distribution market tends toward oligopoly, which is not good for viewers or creators. Thus, to bring about the desired level of competition, various policies prevent MVPDs from engaging in anticompetitive acts with regard to each other or locking up programming in anticompetitive exclusive contracts (“program access” rules).²⁹ These policies enable what competition there is between MVPDs. Without them, satellite television would not have been able to access the content it needed to begin competing with cable and IPTV providers would not have been able to access the content they needed to compete with cable and satellite.

While intra-MVPD competition in the United States is far from vigorous (cable prices in particular remain absurdly high), the situation is still better than it is in some

countries. For example, Rupert Murdoch’s BSkyB has become by far the largest pay TV subscription service in the U.K., largely on the back of sports exclusives which Murdoch has described as a “battering ram” against his competitors.³⁰ The U.S., however, made a policy choice to promote competition in video distribution, and it makes no sense to limit this choice to traditional, facilities-based MVPDs. Like MVPDs, OVDs would benefit from being able to pay for content without being locked out of it by exclusionary contracts, and consumers stand to benefit to an even greater degree from better online content availability than they have from increased MVPD competition.

Thus, if it would be illegal for an MVPD to do something with respect to another MVPD, it should also be illegal for it to do that same thing with respect to an OVD. To that end, the FCC should issue a declaratory ruling (pursuant to 47 U.S.C. §§ 536 and 548, to be precise) stating that “traditional” MVPDs (cable, telco, and satellite) may not engage in unfair practices with respect to all players in the multichannel video market, including OVDs. MVPDs should share their content with OVDs just as they do with MVPDs. And just as it would be illegal for a cable company to try to keep an independent programmer from being carried by a satellite, it should be illegal for a cable system to use its programming contracts as a means to force independent programmers to stay off of online video platforms, whether through express contractual provisions, taking them off the air during negotiations, financial incentives, or more creative means. Finally, just as it is illegal for one MVPD to try to physically block another

from accessing customers through exclusive contracts with municipalities or landlords,³¹ it should be illegal for an MVPD to try to keep an online video provider from accessing customers through contracts, control of physical facilities, or otherwise.

The Commission is already embarking on a proceeding to update its program access rules³² to reflect a changing marketplace (and in response to the D.C. Circuit’s evolving jurisprudence³³), and this presents a good opportunity to begin considering this broader reform.

- ★ The FCC should begin a proceeding to determine which regulations ought to apply to OVDs that choose to operate as cable providers.

From a consumer’s perspective, if it walks and talks like a cable system, it ought to be a cable system. There is nothing magic about coaxial cable that should grant some companies statutory copyright licenses, retransmission consent rights, and program access privileges, but not others.

Of course, OVDs should not automatically be covered by regulations that do not apply to them. While the basic framework of cable and MVPD regulations is written in a broad, technologically-neutral way, some specific rules only make sense as applied to legacy technologies. For example, cable systems often pay “franchise fees” to local governments in exchange for access to public rights-of-way to run wires over. These sorts of rules likely

shouldn’t apply to online cable systems. Still other rules—such as those requiring the FCC to promote competitive navigation devices for MVPDs—may or may not make sense applied to online MVPDs.³⁴ In any event, the Communications Act at no point expressly requires that cable systems be facilities-based. To the extent they are able to guarantee picture quality end-to-end, facilities owners already have a natural advantage over their over-the-top counterparts. They should not receive regulatory benefits as well.

The FCC should therefore allow an online system that meets certain requirements (such as signal security comparable to what is possible on a facilities-based system) to opt in to Title VI status. Such an opt-in would grant regulatory privileges, such as program access rights, which require that MVPDs share content with each other, as well as obligations, such as program carriage rules that make sure MVPDs deal fairly with program providers.³⁵

Determining exactly how to modernize media regulation in a technologically-neutral way will be a complex undertaking, and involves more than just the FCC—for example, the Copyright Office may also need to clarify that the statutory copyright licenses that allow MVPDs to retransmit programming without obtaining permission from each individual programmer should apply to all MVPDs, including online ones.³⁶ As the market develops it may be possible to phase out the statutory license for retransmitters—it is more consistent with the rest of American law and the practices of media industries for retransmissions of content by

MVPDs to be controlled by voluntary copyright licenses, rather than an FCC-managed “retransmission consent” system. It would certainly be more equitable if MVPDs paid content creators directly for the use of their programming. However, such a reform would need to be managed carefully to ensure that competition in video distribution could develop and that prices to consumers did not precipitously rise. When the Government Accountability Office addressed this issue it did not exactly issue a manifesto for reform, titling two sections of its report “The Effects of a Phaseout on the Market and Regulatory Environment Are Uncertain” and “The Effect of a Phaseout of the Statutory Licenses on Prices for Cable and Satellite Television and Consumer Access to Programming Is Unclear.”³⁷ It would not be a good outcome, for instance, if MVPDs (online and traditional) had to obtain multiple permission slips to rebroadcast any given program—if they need to get copyright licenses, they should *only* be required to get copyright licenses, and should not be required to obtain a separate “retransmission” right from local broadcasters or other non-copyright holders.



The law (pictured above) is biased against online video providers.

Some kind of voluntary collective licensing may also be necessary, to prevent transaction costs from inhibiting MVPDs from providing content from multiple sources. Furthermore, to prevent copyright from interfering with other policies intended to promote competition in video distribution, this collective licensing system would probably have to be structured to prevent any one MVPD from obtaining *exclusive* licenses.

These issues may be technical but they are worth addressing, since a system that is systematically biased against online video unnecessarily limits competition and consumer choice.

- ★ Congress and the FCC should reform the law to allow MVPDs more flexibility in carrying broadcast signals.

A number of public policies surrounding broadcast no longer serve the public interest—they serve the interest of networks and affiliate broadcasters. They should be reformed to promote competition between new and existing MVPDs and to prevent broadcasters from

demanding high fees from MVPDs that viewers ultimately pay.

Thus, in retransmission negotiations, both sides should be required to negotiate in good faith and it should be deemed bad faith per se when either an MVPD or a broadcaster threatens to black out a signal during certain high-profile events, such as the Super Bowl or Sweeps Week. To keep viewers from being used as pawns during corporate disputes, during carriage negotiations, MVPDs ought to be able to continue carrying signals under the terms of their last contract. Additionally, any MVPD should be free to negotiate with any station for retransmission consent rights—if a local station demands too high a price, a local cable operator ought to be able to carry the signal from the next market over. But as it stands, the FCC’s “distant signal” prevent cable systems from shopping around for better deals, work to prevent this and reinforce restrictive contracts between networks and affiliates. The FCC should repeal those rules and abrogate, not endorse, exclusionary distribution contracts. Similarly, it should get rid of syndicated exclusivity and network non-duplication rules that give broadcasters stronger territorial rights than they could achieve through private contracts, and repeal “sports blackout” rules³⁸ that punish viewers to suit the interests of major sports leagues.

Finally, no commercial broadcaster should be able to demand the right to be carried on an MVPD, simply by virtue of being a

broadcaster,³⁹ and MVPDs ought to be able to offer broadcast-free subscriptions to their consumers, if that is what their consumers demand.⁴⁰ Commercial broadcasters ought to compete on the merits of their programming. These are all minor, incremental steps, and their effect may be limited by programming and distribution contracts. But there should at least be no express federal policies that limit competition in the video marketplace, and the ability of middlemen to impose costs on consumers should also be reduced.

★ [The FCC should open up device competition.](#)

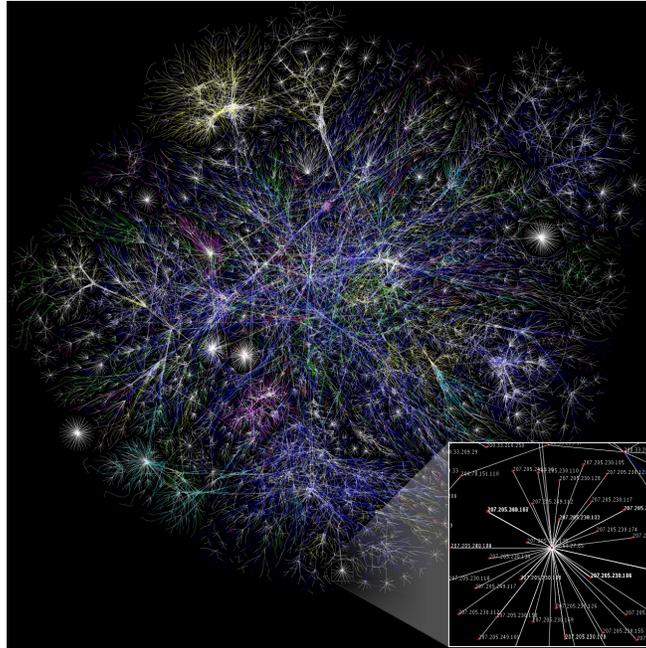
If policymakers hope to see this future they have to act now.

The FCC is well aware of how the lack of innovation in navigation devices—especially when compared to other technologies—inhibits new models of video consumption. As it wrote in its National Broadband Plan, “[b]y any measure, innovation is thriving in mobile and computing devices...The same is not true for set-top boxes, which are becoming increasingly important for broadband as video drives more broadband usage.”⁴¹ It further observed that “[t]he lack of innovation in set-top boxes limits what consumers can do and their choices to consume video, and the emergence of new uses and applications.”⁴² Unfortunately this awareness has not been coupled with the implementation of a solution that would ensure that navigation devices can catch up with computers, tablets, video game consoles, and mobile phones.

While there has been a law on the books since 1996 that requires the FCC to promote “competitive navigation devices”—TV set-top boxes that can access and interact with MVPD content. Unfortunately, CableCARD, the FCC-approved technology that is supposed to achieve that goal, is not a success either technologically or in the marketplace. The way forward for the FCC on this issue is clear: a complete technological specification for something called “AllVid” is already before it that would allow any device, on any MVPD, to access all the content a consumer pays for.⁴³ This would not only promote online video, by making it simple for consumers to watch video on devices that integrate diverse online services with traditional cable or satellite subscriptions, but would introduce the same competition to navigation devices that has been so much a part of other areas of consumer electronics.

★ [The FCC should protect online video and the Open Internet.](#)

The FCC already prohibits broadband ISPs, both wireless and wired, from blocking OVDs that compete with their own video services.⁴⁴



The Internet.

My God...it's full of video

However, it allows providers to engage in “reasonable network management,”⁴⁵ to offer usage-based pricing plans,⁴⁶ and to offer “specialized services.”⁴⁷

But these carve-outs are narrow, and the FCC should be firm when enforcing its rules. Network management practices with an undue effect on video services, or that otherwise use technical cover to control the services consumers access, are not reasonable. Usage-based billing plans that are unrelated to actual costs or constraints should not be allowed, and exempting certain services but not others from bandwidth caps is

unreasonable.⁴⁸ Cable companies should not be able to get away with unilaterally exempting their on-demand video services from open Internet protections simply by labeling them “cable services” and not broadband services. Specialized services must not be a “Get Out of Jail Free” card that allows ISPs to discriminate in favor of their own video offerings—specialized services should actually be special in some way, and not merely relabeled Internet services.⁴⁹ Even certain “bundling” deals that make it uneconomic for a consumer to cut the cord might be unfairly discriminatory.

When it acted to protect net neutrality, the Commission gave providers flexibility. But it did not intend to provide ISPs with a guide to maintaining video market power indefinitely. The FCC can protect online video

The Future of Media Policy

The goal of policy in this space should not be to indefinitely extend regulation into the future—to simply welcome fresh new players into the regulation clubhouse. Rather, the purpose is to promote a market structure where consumer protections are built-in, which lessens the need for continual oversight. The policy recommendations described above either eliminate unnecessary protections for incumbents, or open up markets to new competitors. They are, in essence, deregulatory, since they are aimed at reducing the circumstances that make regulation necessary. At the same time, while rules designed to combat old threats may no longer be needed, policymakers should be vigilant against future problems that could limit communication and the diversity of ideas.

★ Out With the Old: A Competitive Market Reduces the Need For Much Current Media Regulation.

As the market develops, it may be possible to phase out rules that are no longer needed. For example, certain public interest regulation of

broadcasters and cable companies was justified because of the limited competition in those markets. When it comes to broadcast, allowing one voice to speak (by giving it exclusive access to the airwaves) means that another voice goes unheard. Public policy has attempted to ameliorate this, by making sure that broadcasters meet the needs of the communities they serve and do not offend community standards, and by requiring that cable systems air certain beneficial programming. But, if online video becomes a true competitor to MVPDs, this sort of regulation may be redundant.

The only barriers in the way of creating a new online video service are the usual kind—capital costs, time, and energy. There are no special barriers to entry for Internet content providers—no uniquely limited resources and no natural monopoly effects. Adjacent markets, such as broadband access, remain a chokepoint and a cause for concern, but there is little reason to subject a competitive video marketplace, well-stocked with online video providers, to “public interest” or indecency-type content regulation.

In a world of successful broadband video, there may not be any need for intra-provider regulation, such as program access rules. These rules were largely designed to require dominant cable companies to provide must-see programming to new entrants, like satellite TV providers. Today they allow “telephone” companies to provide competitive “cable TV” service over their legacy phone wires (and newly laid fiber optic cable). But mandatory sharing rules may have little role in the online world. While traditionally, it would be wasteful and

duplicative to subscribe to more than one subscription TV service—both of which would offer broadly similar content—just to receive the programming that one or the other has an exclusive on, in the online world, there is no reason why one could not mix-and-match video services, just as Internet users read news and opinion from a wide variety of sites. Just as there is no reason to require the New York Times to make its content available to the Washington Post, there may not be a need for program access rules in the online video future.⁵⁰ Similarly, statutory copyright licenses that are designed for a limited world of video providers may need to be reformed or repealed in a world of increased video competition.

It's impossible to predict what the future of video competition will actually look like, but it's easy to see how it might evolve in a way that makes much traditional media regulation

obsolete. Increased competition could lead to more à la carte video choices. "Channels" of programming might give way to smart playlists (like Pandora "radio stations" and iTunes Genius playlists) and on-demand content. Major content providers, such as sports leagues, might offer their content directly to viewers, while other content (such as movies and TV shows)

might be available on a wide variety of services, not because of proactive regulation, but because it is in the economic interest of creators to license their content as widely as possible.

The most vital point is that if policymakers hope to see this future they have to

act now. The video marketplace is *not* currently moving to a state where competition and demand can take the place of regulation, and only pro-competition policy changes can make it do so.



DIRECTV®



It would be nice if these services were more equal

★ [In With the New? Ownership and Competition Law Online.](#)

There is a public interest in preventing the concentration of too much economic power in too few hands, especially when it comes to media. This persists on, and is in some ways amplified by, the Internet. Market power is not always a result of a government grant: Google does not have an FCC license for search.

“Competition law” takes several forms. In the U.S., the Federal Trade Commission (FTC) prosecutes those who employ unfair methods of competition, and both the FTC and the Department of Justice enforce antitrust law, which prohibits “monopolization” (unfair acts by dominant competitors) and mergers between companies that would substantially lessen competition. Antitrust and unfair competition laws may be better known, but rules restricting the ownership of media outlets are also a form of competition law, tailored to the specific facts of media markets. They may be designed to keep single actors from controlling too many media outlets, such as restrictions on the number of broadcast stations one company can own in a market, or restrictions on the ability of broadcast stations to own newspapers. Or they may be designed to protect creators, as with rules that prevent cable systems from growing too large, or European rules that prevent large bookstores from driving small competitors out of the market with deep discounting.⁵¹

It makes little sense to continue policies that are focused on concentration in the ownership of outmoded distribution technologies. Many

websites have a bigger effect on public opinion than most broadcasters, and since the Internet economy tends to follow the “power law” (20% of the sites get 80% of the attention) on a global scale, issues of concentration and outsized influence are not going away. But it is not clear how to update current media ownership policies to reflect the realities of the digital age, and it is also unclear whether generally-applicable antitrust laws are sufficient to address media concentration challenges. Even in a future with less media regulation, it may be necessary to continue policies that limit concentration, and policymakers should pay attention to emerging threats to the free flow of ideas.



But to get to this future, where the market settles in a more competitive and consumer-friendly state that does not require extra government supervision, policymakers have to act today. Today’s video marketplace is having trouble adapting to meet new technological and business realities. If deregulated prematurely, it is not likely to evolve in a more consumer-friendly direction—instead, incumbents would be likely to consolidate their position. Short-term steps to increase competition are needed today.

Conclusion

The effects of removing barriers to online video are unpredictable. The entire purpose of these policies is not to structure the market in a

way that regulators, analysts, or futurists think is best. There is no way to see what business models are both desired by consumers and economically sustainable until they are tried. Nevertheless, one can make educated guesses and analogies to past media evolutions.

Old forms of media do not go away—they are simply relegated to those areas where they have a “comparative advantage.” Radio continues as a source of news and entertainment decades after TV has usurped its central cultural role; vinyl records continue to be manufactured for their audience of collectors, DJs, and audiophiles; and movies earn millions at the box office in a nation of homes full of HDTVs and Blu-Ray players. Thus, even in a mature video marketplace where online video is a major player, it is likely that there will still be a place for cable, satellite, and even broadcast TV. The physical networks that deliver those services are built—no one will shut them down just because they are no longer the latest and greatest thing. It may be that the one-to-many “broadcast” model will remain better suited for delivering some kinds of content (such as news, live sports, and newly-released popular programming) than the many-to-many architecture of the Internet. Multicast or peer-to-peer technology may allow online video to catch up—or bandwidth might become significantly more abundant—but the different architecture of old-style video providers may prove to be an advantage for some time.

Additionally, the “bundled” nature of cable and satellite TV, where people buy access to a pre-screened assortment of content that airs at certain times, may continue to be appealing to

many. Not everyone wants to pick and choose what to watch (although smart “playlists” could take over the role of channels in on-demand services). Indeed, if MVPD prices are driven down by competition from online video, it may become more appealing to people who would otherwise be tempted to cut the cord.

Or it may be that every cable company goes out of business and broadcasters sell their spectrum to cell phone companies. There is no way to predict these things. The only certain thing is that neither content creators nor viewers benefit from today’s Rube Goldberg-like system for delivering valuable video content to the home. By following the recommendations in this report, policymakers can ensure that incumbents do not stand in the way of the evolution of the TV industry.

Endnotes

† John Bergmayer is a Senior Staff Attorney at Public Knowledge. This whitepaper is based in part on comments of Public Knowledge to the FCC regarding MVPD competition, which are available at <http://www.publicknowledge.org/comments-mvdp-competition-report-proceeding>. The cover image incorporates a photograph by Kevin Simpson, a.k.a. videocrab, which was made available on Flickr with a Creative Commons Attribution-ShareAlike 2.0 Generic license, and can be found at <http://www.flickr.com/photos/videocrab/116136642>. The law library picture is by user Lakshmansrikanth on Wikimedia Commons, and is available at http://commons.wikimedia.org/wiki/File:Law_library_3.jpg. It is released under the Creative Commons Attribution-Share Alike 3.0 Unported license. The Internet Map picture is from author “The Opte Project” on Wikimedia Commons and is available at http://commons.wikimedia.org/wiki/File:Internet_map_1024.jpg under a Creative Commons Attribution 2.5 Generic license.

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² *Area Man Constantly Mentioning He Doesn't Own A Television*, THE ONION, (Feb. 9, 2000) <http://www.theonion.com/articles/area-man-constantly-mentioning-he-doesnt-own-a-tel,429>.

³ Cross-Platform Report Q3 2011, NIELSEN, <http://www.nielsen.com/content/corporate/us/en/insights/reports-downloads/2012/cross-platform-report-q3-2011.html>.

⁴ Current Telecom Developments 3, (Nov. 23, 2011) <http://www.paulweiss.com/files/Publication/086165d1-b495-4ae7-8b28-56cea1671135/Presentation/PublicationAttachment/03abe426-8fbc-4435-bfd0-591239b4a19f/CTD11-23-11.pdf>.

⁵ JOHN GILLES, CABLE'S LOST GENERATION (2010), http://10x10.method.com/assets/pdf/Method_10x10_Cables_Lost_Generation.pdf.

⁶ Paul Edward Geller, Keynote Speech for the meeting of the International Association for the Advancement of Teaching and Research in Intellectual Property (ATRIP) in Montreal (July 11, 2005) EUROPEAN INTELLECTUAL PROPERTY REVIEW, Vol. 28, p. 139, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=706162.

⁷ See, e.g., H.R. 3675, 112th Cong. (2011).

⁸ MICHAEL HELLER, THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECKS MARKETS, STOPS INNOVATION, AND COSTS LIVES 1 (Basic Books 2008). A clear example of this is the “tangled pacts” that are holding back the much-vaunted “TV Everywhere” proposal. Sam Schechner & Shalini Ramachandran, *Plans for ‘TV Everywhere’ Bog Down in Tangled Pacts*, WALL STREET JOURNAL (Mar. 5, 2012) at B1.

⁹ For a thorough explanation of this process see TIM WU, THE MASTER SWITCH: THE RISE AND FALL OF INFORMATION EMPIRES (Alfred A. Knopf 2010).

¹⁰ Press Release from Time Warner Cable and Comcast, *Time Warner Cable and Comcast to Acquire Assets of Adelphia Communications; Companies Also to Swap Certain Cable Systems and Unwind Comcast's Interests in Time Warner Cable and Time Warner Entertainment*, April 21, 2005, <http://www.comcast.com/About/PressRelease/PressReleaseDetail.ashx?PRID=156>.

¹¹ Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. For Consent to Assign Licenses and Transfer Control of Licensees, *Memorandum Opinion and Order*, 26 FCC Rcd 4238, ¶ 78 (2011).

¹² Prominent success stories include Steam (games), Netflix (streaming movies and TV), iTunes (downloadable movies, TV, and music), and Kindle (ebooks).

¹³ Competitive Impact Statement of the Department of Justice, *United States v. Comcast Corp.*, 1:11-cv- 00106, (DC Cir. Jan. 18, 2011) (hereafter DoJ Analysis) at 28, available at <http://www.justice.gov/atr/cases/f266100/266158.pdf>.

¹⁴ See, e.g., Janko Roettgers, *Logitech Revue: The Wrong Choice for Cord Cutters*, GIGAOM (Oct. 6, 2010) <http://gigaom.com/video/logitech-revue-the-wrong-choice-for-cord-cutters> (describing how the Logitech Revue’s TV-based browser is blocked from accessing certain sites).

¹⁵ Physical barriers are quite high and include the expense of obtaining spectrum licenses, building broadcasting facilities, launching satellites, or laying down cables to every house in a city.

¹⁶ See *WPIX v. ivi*, Case 1:10-cv-07415-NRB (S.D.N.Y. Feb. 22, 2011) (granting temporary restraining order against an OVD because it was not a “cable” system for copyright statutory license purposes); *Digital Broadcasting OVS Certification to Operate an Open Video System*, Memorandum Opinion & Order, DA 11-996, at ¶ 3 (rel. June 3, 2011) (denying an Open Video Certification because the applicant “failed to sufficiently and exhaustively indicate to the Commission the local communities it intends to serve and has failed to adequately serve a copy of its application on designated telecommunications officials in such local communities”); *Sky Angel U.S.*, Order, 25 FCC Rcd 3879, ¶7 (M.B. 2010) (denying a program access complaint from an online cable system by interpreting the term “channel” to require a physical “transmission path”). Sky Angel has recently sought a mandamus order against the FCC to force it to consider its issue more fully.

¹⁷ Satellite MVPDs and even broadcasters are both facilities-based, enjoy regulatory advantages, and even possess a degree of market power, but they (generally) are not also ISPs.

¹⁸ For our purposes, “bandwidth” refers to the data transfer rate of a broadband connection, measured in bits per second. (High-bandwidth connections are often referred to as “high speed” networks, since content transfers more quickly at a higher data rate.) High-quality video streaming requires at least 2.4 Mbps, and works better with much more. By contrast, dial-up Internet maxes out at 56 Kbps, and even AT&T’s “fast” wireless 3G network only reaches average speeds of about 1410 Kbps, far too low a rate for high-quality video streaming.

¹⁹ That is, to display a video in real time to a viewer—where a minute of video takes no longer than a minute to transfer, and the video is displayed as it transfers—as opposed to “downloading,” where slower-than-real-time transfers are saved on a viewer’s computer for later playback.

²⁰ In areas where a broadband provider faces no competition, the “one monopoly profit” principle suggests that it can make up the money from lost cable TV customer by simply raising the price of broadband, which means that it would have no incentive to take actions unfavorable to online video. Indeed, it suggests that it could benefit from the increased demand for broadband generated by online video. But the broadband (and the pay TV) market faces limited, constrained competition, not no competition. If no viable broadband competitor (such as DSL broadband service, which is offered over phone lines) is available to a given customer’s home, the customer may choose to access the Internet only over his cell phone, or at the local coffee shop or library, or through a slower DSL connection, rather than pay the would-be monopolists price. Thus, the “one monopoly profit” objection to the observation that cable broadband providers have a built-in incentive to discriminate against online video does not hold, because the broadband market faces constrained competition, and there are many near substitutes. Cable broadband providers have significant market power, but it is not unlimited.

²¹ U.S. Dept of Justice, Competitive Impact Statement, *United States v. Comcast Corp.*, (Jan. 18, 2011), available at <http://www.justice.gov/atr/cases/f266100/266158.htm>.

²² Philip Dampier, *Bell CEO: Bandwidth Usage Charges Are About Monetizing Video Traffic for Shareholders*, STOP THE CAP! (Mar. 24, 2011) <http://stopthecap.com/2011/03/24/bell-ceo-bandwidth-usage-charges-are-about-monetizing-video-traffic-for-shareholders> (quoting Bell Canada CEO explaining its strategy that “as we see a growth in video usage on the internet, making sure we’re monetizing that for our shareholders through the bandwidth usage charges.”)

²³ Id. See also *Everyone Already Pays their Fair Share*, POLICY BY THE NUMBERS (Dec. 14, 2011) <http://policybythenumbers.blogspot.com/2011/12/everyone-already-pays-their-fair-share.html>.

²⁴ *Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses*, MB Docket No. 10-56, Memorandum Opinion and Order (2011) available at <http://transition.fcc.gov/transaction/comcast-nbcu.html>.

²⁵ See Art Brodsky, *Merger ‘Conditions’ Can’t Fail As Big Deals Are On The Line*, PUBLIC KNOWLEDGE, March 16, 2012, <http://www.publicknowledge.org/blog/merger-conditions-cant-fail-big-deals-are-lin>.

²⁶ For an excellent analysis of the implications of this “TV Everywhere” scheme, see MARVIN AMMORI, TV COMPETITION NOWHERE: HOW THE CABLE INDUSTRY IS COLLUDING TO KILL ONLINE TV (2010), <http://www.freepress.net/files/TV-Nowhere.pdf>.

²⁷ Dean Takahashi, *Why Didn’t Apple Launch its Own TV? That Will Be its Next Step*, VENTURE BEAT (Sept. 2, 2010) <http://venturebeat.com/2010/09/02/why-didnt-apple-launch-its-own-tv-that-will-be-its-next-step/>.

²⁸ *Use of the Carterfone Device in Message Toll Telephone Service*, 13 FCC 2d 420 (1968).

²⁹ See 47 U.S.C. § 548.

³⁰ See Torin Douglas, *Murdoch’s Rise to the Top*, BBC NEWS (Mar. 12, 1999), http://news.bbc.co.uk/2/hi/special_report/1999/03/99/murdochs_big_match/167937.stm. Sky’s marketshare is discussed in Ofcom’s Pay TV Statement (Mar. 31, 2010), available at http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/statement/paytv_statement.pdf. While some free TV services compete with Sky, Sky has significant marketshare in the pay market.

³¹ *Nat. Cable & Telecommunications Assoc. v. FCC*, 567 F. 3d 659 (2009).

³² Revision of the Commission’s Program Access Rules, *Notice of Proposed Rulemaking*, FCC 12-30, MB Docket No. 12-68 (rel. Mar. 20, 2012) (Program Access NPRM)..

³³ See *Cablevision Systems Corp. v. FCC*, 597 F. 3d 1306 (D.C. Cir. 2010).

³⁴ On the one hand, navigation devices typically provide conditional access to MVPD networks, and this sort of access is typically provided with online services through other means (e.g., a username and password). However, for those services that choose to avail themselves of program access rights, it may be a valid policy to require them to provide open APIs so that their services can be accessed on various devices, and to encourage broad compatibility between their services and various software platforms. An online MVPD that was only accessible through, for instance, a Microsoft Xbox, may be running afoul of the intent of 47 U.S.C. § 549.

³⁵ Of course, certain regulations, such as those affecting public safety or accessibility, may be applied even to OVDs that choose to maintain Title I status. There does not have to be a telecommunications-specific or competitive justification for policies like these.

³⁶ See *WPIX. v. ivi*, Case 1:10-cv-07415-NRB (S.D.N.Y. Feb. 22, 2011) (granting a temporary restraining order against an OVD because it was not a “cable” system for copyright statutory license purposes).

³⁷ GAO, STATUTORY COPYRIGHT LICENSING: IMPLICATIONS OF A PHASEOUT ON ACCESS TO TELEVISION PROGRAMMING AND CONSUMER PRICES ARE UNCLEAR (2011), <http://www.gao.gov/new.items/d1275.pdf>. See also U.S. COPYRIGHT OFFICE, SATELLITE TELEVISION EXTENSION AND LOCALISM ACT, § 302 (2011), <http://www.copyright.gov/reports/section302-report.pdf>; The Silicon Flatirons Roundtable Series on Entrepreneurship, Innovation, and Public Policy, *The Cable and Satellite Compulsory Copyright Licenses*, John Bergmayer, *Rapporteur* (April 2011), <http://www.silicon-flatirons.org/documents/publications/report/CompulsoryCopyrightLicenses.pdf>.

³⁸ *Petition for Rulemaking to Eliminate the Sports Blackout Rule*, MB Docket No. 12-3, Reply Comments of Sports Fans Coalition, Inc. (2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7021870238>.

³⁹ Today, a policy called must-carry gives broadcasters this right. See 47 C.F.R. § 76.56.

⁴⁰ Currently, all broadcast programming must be carried on the “basic tier” that all cable subscribers must pay for.

⁴¹ CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN (2010), at § 4.2.

⁴² *Id.* at § 3.2.

⁴³ See Filing by the AllVid Tech Company Alliance in Video Device Competition, MB Docket No. 10-91 (Sep. 20, 2011), available at <http://apps.fcc.gov/ecfs/comment/view?id=6016842240>.

⁴⁴ *Preserving the Open Internet*, Report & Order, 25 FCC Rcd. 17905, ¶ 1 (2010).

⁴⁵ *Id.* ¶ 80.

⁴⁶ *Id.* ¶ 72.

⁴⁷ *Id.* ¶ 112.

⁴⁸ See Letter from Netflix to FCC, GN Docket No. 09-191 (May 10, 2011), available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7021347961>.

⁴⁹ The Commission has stated that “specialized services” may not be used to evade Internet openness protections. *Protecting the Open Internet* at ¶¶ 112, 113, and that it would not permit carriers to offer services designed to evade the application of its rules. *Id.* at 44-45.

⁵⁰ See Program Access NPRM ¶ 9.

⁵¹ These rules are designed to protect independent content producers by ensuring they don’t have to deal with just a small handful of cable systems nationwide. They have been less than effective.