Dimension of Power in Networked Society New Sources, New Forces

ARCEP, Paris February 22, 2017

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Socio-cultural: "open" vs. "proprietary"; Netheads vs. Bell-heads



Organizational: IETF W3C; FOSS



Technical: TCP/IP HTML/HTTP; ~Open APIs



Law: Common carrier; Antitrust; Unbundling; Commons



Market: Windows
Dominant (/open APIs)
Competitive ISPs; no
dominant websites

E.g. no organizational space to force ATM; or DirectX / MS Java implementations No technical affordance to prevent Skype or Firefox installation and running

Websites / portals Nascent web

Browser / other apps

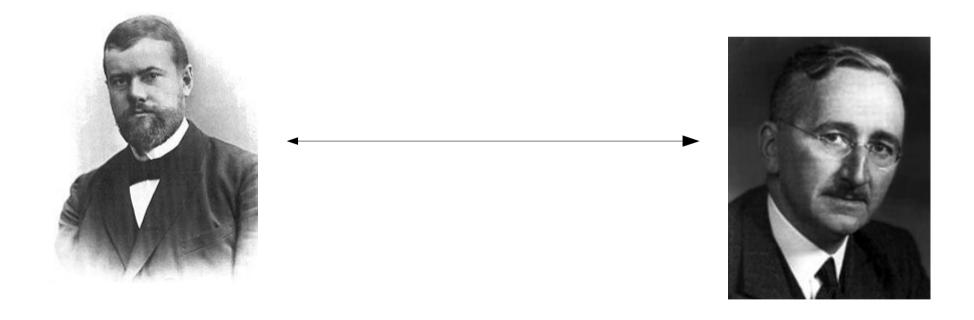
Internet

Windows; Apple OS; Linux

PC / standards-based components

Copper wire / DSL

Interlocking system effects that support diffusion or decentralization of power of interactions mediated by the Internet



Privatization, Deregulation, Competition



















Communities of practice Learning networks Commons Cooperation Openness





Socio-cultural: "open" vs. "proprietary"; Netheads vs. Bell-heads

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Dominant (/open APIs)
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Windows; Apple OS; Linux

SMARTPHONE => iPHONE

Copper wire / DSL



 ${\it Phone Story}, a {\it game that satirizes the dark side of iPhone manufacturing, gets banned by Apple.} {\it Image courtesy Molle industria}$



Websites / portals Socio-cultural:Consumer / Nascent web User experience; Investment incentives; Browser / other apps Network management; QoS, "Bell-head" resurgence **Cloud services** Organizational: IETF W3C; FOSS; Apple, Google; Wireless carriers bring **AppStore** different organizational behaviors Internet Technical: TCP/IP; HTML5 **PLUS** new layer controlled iOS (+later Android) APIs; DRM Law: Fewer limits on carrier **SMARTPHONE =>** None on Smartphone; **iPHONE** Patents; Jailbreaking/ DMCA Wireless / cellular Market: Apple 1st; then Android & Google; (//WiFi) AT&T, VZ, T-Mobile & Sprint



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OUR WORK

DEEPLINKS BLOG

PRESS ROOM

FEBRUARY 1, 2017 | BY CORY DOCTOROW



Indefensible: the W3C says companies should get to decide when and how security researchers reveal defects in browsers

The World Wide Web Concertium has just signaled its intention to deliberately create legal

Embedded software; "Internet of Things" => DRM makes software-embedded products of all forms non-replicable infrastructure for all compatible competitors or complements

WIRED

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COMMENT 137

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BRIAN BARRETT GEAR 09.23.16 6:01 A

HP HAS ADDED DRM TO ITS INK CARTRIDGES. NOT EVEN KIDDING (UPDATED)



Socio-cultural:Consumer /
User experience;
Investment incentives;
Congestion management;
QoS, "Bell-head" resurgence

Organizational: Apple, Google, wireless carriers

Technical: TCP/IP; HTML5
PLUS new layer controlled
APIs; DRM

Law: Fewer limits on carrier
None on Smartphone;
Patents; Jailbreaking

Market: Apple 1st; then Android & Google; AT&T, VZ, T-Mobile & Sprint

Websites / portals Nascent web

Browser / other apps

AppStore

Internet

iOS (+later Android)

SMARTPHONE => iPHONE

Wireless / cellular (//WiFi)

Net neutrality order directly challenges this



Federal Communications Commission Washington, D.C. 20554

December 1, 2016

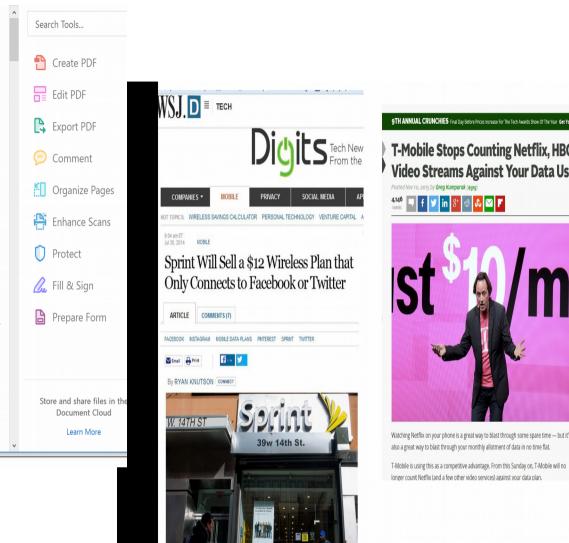
Robert W. Quinn, Jr.
Senior Executive Vice President, External and Legislative Affairs AT&T
1120 20th Street NW, Suite 1000
Washington, DC 20036

RE: AT&T's Sponsored Data Program

Dear Mr. Quinn:

The Wireless Telecommunications Bureau has reviewed the letter and white paper you submitted on November 21, 2016. We find that those responses fail to alleviate the serious concerns expressed in our November 9 letter regarding the potential anti-competitive impacts of AT&T's wholesale Sponsored Data program for zero-rated mobile video services. Indeed, your submission tends to confirm our initial view that the Sponsored Data program strongly favors AT&T's own video offerings while unreasonably discriminating against unaffiliated edge providers and limiting their ability to offer competing video services to AT&T's broadband subscribers on a level playing field. We have therefore reached the preliminary conclusion that these practices inhibit competition, harm consumers, and interfere with the "virtuous cycle" needed to assure the continuing benefits of the Open Internet. In order to finalize the Bureau's review of this matter, we have set forth below a set of detailed questions and request your response by December 15.

I once again emphasize that we are neither critiquing AT&T's end-user prices for DIRECTV Now nor its strategy for competing in the retail video market. Indeed, as an over-the-top (OTT) offering that is available over any Internet service provider's network – including those owned by video market incumbents such as cable operators – DIRECTV Now relies on the safeguards provided by the *Open*



Control over the wireless connection translated into platform and content layer power

The innovation and learning effects of leveraging are often externalities from the perspective of consumers Socio-cultural:Consumers; Investment incentives; Network management QoS Video streaming as a core

Netflix, Hulu, etc. Video streaming central

Browser / other apps

Organizational: Cablecos; Industry negotiated (e.g. HTML5 DRM)

AppStore extended to PC; DRM built in

Internet

Technical: TCP/IP; HTML5 **DRM; network management**

Apple devices increase; Xbox; Tablets; Windows 10

PCs and video streaming devices/ Game consoles

Law: Battle over net Neutrality; First Amend.? Mergers

High-Speed Home Broadband / Fiber/ DOCSIS 3.0

Market:
Natural monopoly
re-emerges?

Net neutrality order directly challenges this

Content Socio-cultural:business orientation; trust; security; **Privacy** Fear and convenience drive Applications / software **Cloud services** Organizational: internal to providers AppStore model Technical: **Proprietary standards** Internet for data portability; interoperability iOS; Android; Xbox; Tablets; Windows 10 Law: No requirements for interoperability; Smartphones, streaming portability; privacy; devices / game consoles Market: Amazon; Microsoft; Wireless / IBM; Google; Salesforce plus High-Speed Home smaller like Dropbox etc. Broadband



Amazon Erases Orwell Books From Kindle



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REPRINTS

my SHARE

A commuter using an Amazon Kindle while riding the subway in New York.

By BRAD STONE

Published: July 17, 2009

In <u>George Orwell</u>'s "1984," government censors erase all traces of news articles embarrassing to Big Brother by sending them down an incineration chute called the "memory hole."

Related

Times Topics: Kindle

Gadgetwise Blog: Amazon Offers Free Replacements for Cracked Kindles

Post a Comment on Pogue's

On Friday, it was "1984" and another Orwell book, "Animal Farm," that were dropped down the memory hole

- by Amazon.com.

— by <u>Amazon.com</u>.

In a move that <u>angered customers</u> and generated waves of online pique, <u>Amazon</u> remotely deleted some digital

Electronic health records in US Early mover advantage



Dashboards

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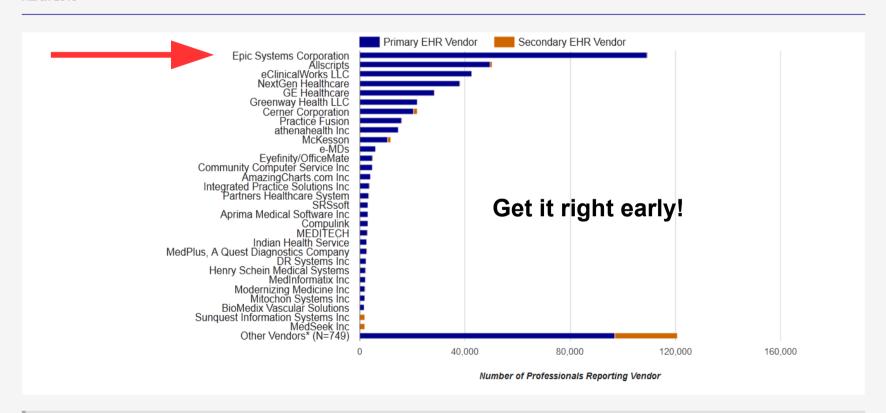
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EHR Vendors Reported by Health Care Professionals Participating in the CMS EHR Incentive Programs and the ONC Regional Extension Centers Program

March 2015



Note: Within a health care professional's EHR system, a <u>primary</u> EHR is a complete EHR or, if the professional does not have a complete EHR, it is the EHR that meets the most Meaningful Use criteria. If a professional has two or more complete EHRs, all of these EHRs are considered primary for the purpose of this report. A <u>secondary</u> EHR is any additional modular EHR used within the professional's EHR system. *144 of the 749 Other Vendors only supply secondary EHRs to participating health care professionals. Of the 605 Other



Mobile Applications and Portals

Integrated PHR

MyChart gives patients controlled access to the same Epic medical records their doctors use, via browser or mobile app (for iOS and Android). Its self-serve online functions can activate patients to improve their own health, reduce the cost of customer service and provide a vital communication link to support accountable care. (Note that not all MyChart functions are available on mobile.) Patients can:

- · View test results
- · View upcoming & past appointments
- · Fill out pre-visit questionnaires
- · Schedule appointments
- · View paperless statements & pay bills online
- Upload photos
- · Update medications and allergies

- · Connect to home devices
- · Refill prescriptions
- . Message securely with providers
- · View a child's records and print growth charts
- . Manage the care of elderly parents
- · View education topics triggered by EHR data
- · Get a chronic disease summary w/reminders



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Connectivity

Meaningful Use

Services

Third Party

Contact

Inpatient Engagement

Bedside is a patient-driven, interactive tablet app, designed to strengthen the patient's relationship with the care team - making the hospital stay more enjoyable and productive.

Patient-facing options include:

- Happening Soon a real-time schedule of planned procedures and inpatient events.
- Taking Care of Me a visual summary (with profiles) of the care team.
- I Would Like... an overdue improvement on the nurse call button for requests.
- . Note to Self a recorder and notepad for patients to prepare for discharge.
- . My Health a patient-friendly summary of lab results and vitals.
- To Learn a hub for patient education, promoting quick recovery and reduced readmission.
- Messages an easy place to communicate with the care team on the patient's terms.
- MyChart Activation so patients can remain engaged when they return home.



Handheld Mobile for Providers

Haiku (for iOS and Android) gives physicians secure and portable access to patient charts, whether they are in the hallways of the practice, rounding at the hospital or away from work. Functionality includes chart review, patient lists, schedule, search, messaging, e-prescribing, dictation and clinical image capture.

Physician Access for iPad

Canto offers access to Epic charts, messaging and other EMR functions. Physicians can use the dashboard-style front end to check schedules, respond to messages, dictate notes and review lab results from anywhere. Rounding physicians can get up to speed on patients before entering their rooms and dictate notes or send messages immediately after leaving.



Lucy is a PHR that is not connected to any facility's electronic medical record system. It stays with patients wherever they receive care and allows them to organize their medical information in one place that is readily accessible. Patients can enter health data directly into Lucy, pull in MyChart data or upload standards-compliant Continuity of Care Documents from other facilities.

Epic's Care Everywhere software can also retrieve documents from Lucy, making this information available to clinicians as part of

Data portability and interoperability critical;

Open standards

Socio-cultural: consumer protection framing; sometimes freedom; vs. fear, security, Convenience, user experience

Organizational: internal to providers

Technical: Proprietary standards

Law: voluntary enforcement EULAs; private ordering

Market: Tippy, winner-takeall markets; FB clearest; Google search, maps, user Video; maybe Amazon? Content

Applications / software

Platforms: Facebook; Google Amazon? Neflix? Uber?

Cloud services

AppStore model

Internet

iOS; Android; Xbox; Tablets; Windows 10

Smartphones, streaming devices / game consoles

Wireless /
High-Speed Home
Broadband

	<=1990s	2000s	2010s=> ?
Music	Recording industry	Napster/Grokster Pirate Bay Voluntary payments	Spotify; YouTube ContentID

Alternative compensation

Sonicbids ("middle class"

artists licensing &

performing)









WHAT SHOULD I DO ABOUT YOUTUBE?

My Google Youtube rep contacted me the other day. They were nice and took time to explain everything clearly to me, but the message was firm: I have to decide. I need to sign on to the new Youtube music services agreement or I will have my Youtube channel blocked.

This new music service agreement covers my Content ID account and it includes mandatory participation in Youtube's new subscription streaming service, called Music Key, along with all that participation entails. Here are some of the terms I have problems with:

- 1) All of my catalog must be included in both the free and premium music service. Even if I don't deliver all my music, because I'm a music partner, anything that a 3rd party uploads with my info in the description will be automatically included in the music service too.
- 2) All songs will be set to "montetize", meaning there will be ads on them.
- 3) I will be required to release new music on Youtube at the same time I release it anywhere else. So no more releasing to my core fans first on Bandcamp and then on iTunes.
- 4) All my catalog must be uploaded at high resolution, according to Google's standard which is currently 320 kbps.
- 5) The contract lasts for 5 years.

I can't think of another streaming service that makes such demands. And if I don't sign? My Youtube channel will be blocked and I will no longer be able to monetize (how I hate that word) 3rd party videos through Content ID.

I told the rep I'm happy with Content ID as it is. Can't I just continue to participate in Content ID and not be a part of Music Key?

No. The rep said they can't have music in the free version that is not in the paid version, it would be bad for their users. All music content has to be licensed under this new agreement.

ABOUT

Lwrite music I play the cello and the computer. There are dots over my e.

ELSEWHERE



ITUNES







Download on iTunes

MUSIC





	<=1990s	2000s	2010s=> ?
Music	Recording industry	Napster/Grokster Pirate Bay Voluntary payments Alternative compensation Sonicbids ("middle class" artists licensing & performing)	Spotify; YouTube ContentID
News	Traditional Broadcast Newspapers Cable	Blogs, Writable Web; Citizen journalism Networked Fourth Estate	FB newsfeed



Stuart Franklin, Magnum



Arthur Tsang Hin Wah, Reuters



Charlie Cole, Newsweek



Jeff Widener, Associate Press





'I wasn't reaching for it'

Castile's dying words were, "I wasn't reaching for it," Choi said.

Reynolds started live-streaming onto Facebook about 40 seconds after the last shot.



The aftermath of the shooting was streamed onto Facebook Live by Castile's girlfriend.

Reynolds' video feed showed Castile slumping in the front seat with blood covering his shirt. Her



Frustrated by unreliable printers?

DON'T AGONIZE

ltimore

Facebook deactivated Korryn Gaines' account during standoff, police say

 $Social\ network\ granted\ emergency\ request\ from\ Baltimore\ County\ police\ as\ she$ broadcast the standoff before she was killed, officers say



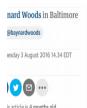
In the middle of a five-hour standoff that ended in the death of 23-year-old

1 Korryn Gaines broadcast her standoff with police on social media. Photograph: facebook image

If you use it, if you like it, then why not pay for it? It's only fair.



Advertisement



is article is 4 months old



resistance to needle exchanges during Indiana's HIV outbreak last year is the direct result of systemic failure.

• "I'm 21 so you can have it back!" This 23-year-old got her lost ID back in the mail, along with a hilarious thank you note 🛰😊

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BuzzFeednews -



Feb.-April

//www.buzzfeed.com/craigsilverman/viral-fake-election-news-outperformed-real-news-on-facebo

posted on Nov. 19, 2016, at 1:50 a.m.

BuzzFeed News Reporter

election news stories on Facebook generated more engagement than t

Zuckerberg: "There Is More Work To Be Done" With Fake News On Facebook

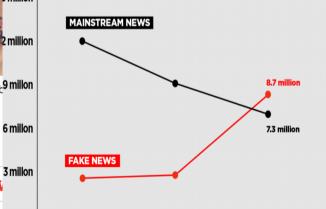
The Facebook CEO listed some concrete steps to address its fake news problem.

Total Facebook Engagements for Top 20 Election Stories



How Normal Are Your Celet 9 millon Actually?

Captain Morgan Cannon 6 millon



May-July

ENGAGEMENT REFERS TO THE TOTAL NUMBER OF SHARES, REACTIONS, AND COMMENTS

FOR A PIECE OF CONTENT ON FACEBOOK SOURCE: FACEBOOK DATA VIA BUZZSUMO

Aug-Election Day

BuzzFeedNEV

In The News Today

• Donald Trump broke with de US policy by speaking with president of Taiwan Friday, that could anger China.

after a fire broke out during

• At least nine people have b



Plane Carrying Brazilian So Skipped Refuel Stop Before Crash



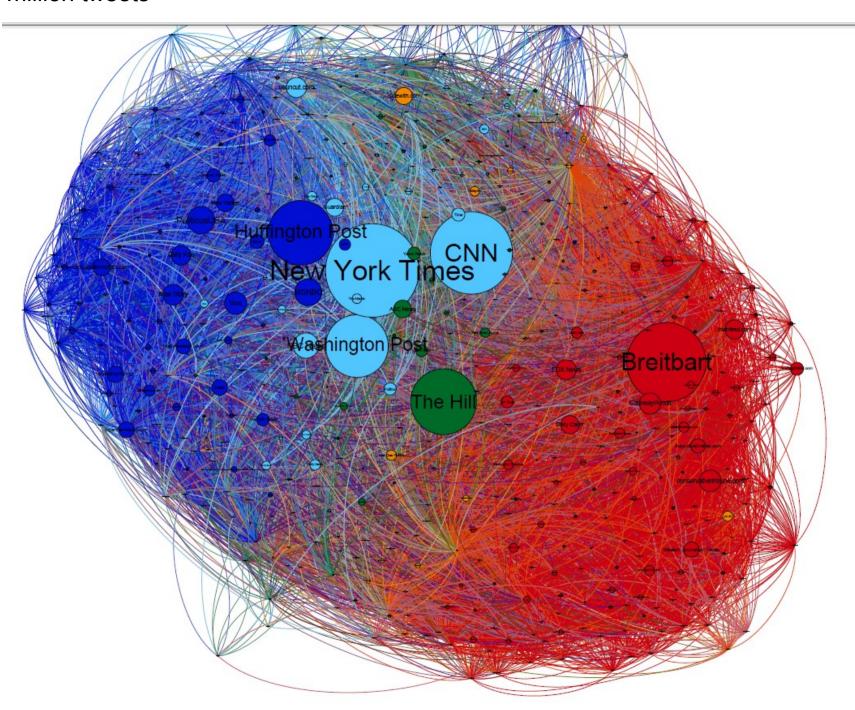
One Year After San Bernard Attack, Internet History Pro To Motive



roubled that Facebook is doing so little to combat fake news," said Brendan

Overall Election by FB shares, \sim 2 million stories collected from \sim 700 million tweets



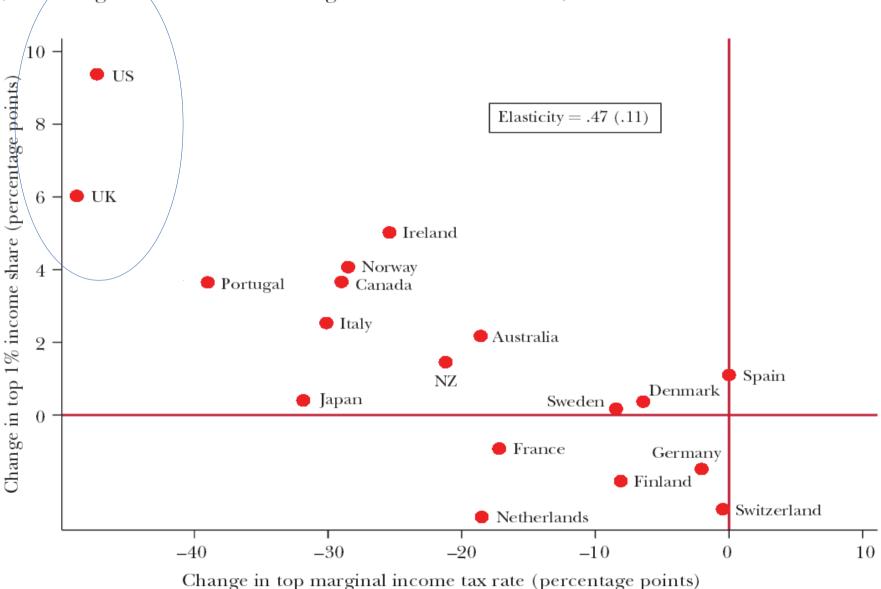


	<=1990s	2000s	2010s=> ?
Music	Recording industry	Napster/Grokster Voluntary payments Alternative compensation	Spotify; YouTube ContentID
News	Traditional media	Networked Fourth Estate	FB newsfeed
Production	Managerial Capitalism To Neoliberalism; Global supply Chains; post-Fordism	FOSS, Peer production Commons-based production	Uber? On demand economy Efficient, consumer- oriented or extractive?

Figure 4

Changes in Top Income Shares and Top Marginal Income Tax Rates since 1960

(combining both central and local government income taxes)



Source: Piketty, Saez, and Stantcheva (2011, revised October 2012, figure 3). Source for top income







Re-embedding economic production in social relations

Mixing public law and investment; with market-enabling and non-market social production



ABOUT SHARING CITY SEOUL

MEET THE SHAREHUB

SHI



ARTICLE 29 DATA PROTECTION WORKING PARTY



16/EN WP 242

Data portability & Interoperability offer one critical dimension

Guidelines on the right to data portability

Adopted on 13 December 2016

Socio-cultural: Behavioral Sciences; "Nudge"; behavioral insights teams

Organizational: Datadriven marketing

Technical: ML; AI

Law: Data Portability; Privacy. EU must lead!

Market: Big incumbents control troves; becomes non-replicable infrastructure investment; barrier to entry

Content

Big

Data

Qο

Behavioral marketing

Applications / software

Platforms

Cloud services

AppStore model

Internet

iOS; Android; Xbox; Tablets; Windows 10

Smartphones, streaming devices / game consoles

Wireless /
High-Speed Home
Broadband

Socio-cultural: Are we seeing a re-assertion of passive consumption?

Big

Data

Qο

Behavioral marketing

Organizational: Content industries licensing deals with Netflix, Hulu

Technical: DRM embedded more widely

Law: IP reasserted in practice

Market: Netflix, Amazon, Hulu, etc.; Hollywood; Comcast

Netflix; Amazon Video

Applications / software

Platforms

Cloud services

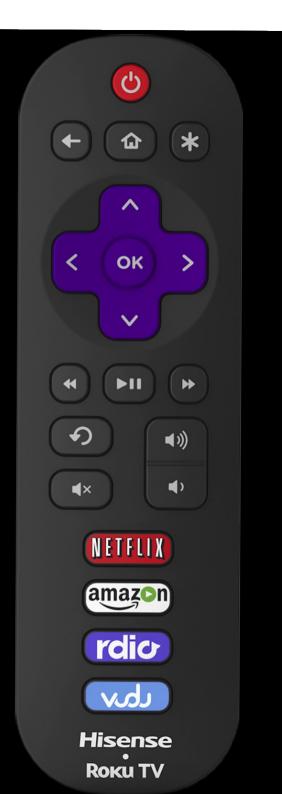
AppStore model

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Broadband







January 09, 2014 927 notes

ABOUT

Ve are Huxleying ourselves into the full Orwell.

as I might, I can't shake the feeling that 2014 is the year we lose the Web. The C push for DRM in all browsers is going to ensure that all interfaces built in ML5 (which will be pretty much everything) will be opaque to users, and it will be egal to report on security flaws in them (because reporting a security flaw in DRM poses you to risk of prosecution for making a circumvention device), so they will riddled with holes that creeps, RATters, spooks, authoritarians and crooks will able to use to take over your computer and fuck you in every possible way.





The Mozilla Blog

News, notes and ramblings from the Mozilla project

Update on Digital Rights Management and Firefox



Denelle Dixon-Thayer

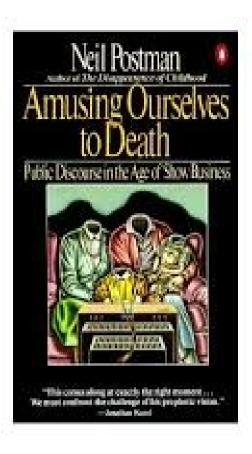




A year ago, we announced the start of efforts to implement support for a component in Firefox that would allow content wrapped in Digital Rights Management (DRM) to be played within the HTML5 video tag. This was a hard decision because of our Mission and the closed nature of DRM. As we explained then, we are enabling DRM in order to provide our users with the features they require in a browser and allow them to continue accessing premium video content. We don't believe DRM is a desirable market solution, but it's currently the only way to watch a sought-after segment of content.

Today, Firefox includes an integration with the Adobe Content Decryption Module (CDM) to playback DRM-wrapped content. The CDM will be downloaded from Adobe shortly after you upgrade or install Firefox and will be activated when you first interact with a site that uses Adobe CDM. Premium video services, including Netflix, have started testing this solution in Firefox.

Because DRM is a 'black-box' technology that isn't open source, we have designed a security sandbox that sits around the CDM. We can't be sure how other browsers have handled the "black-box" issue but a sandbox provides a necessary layer of security. Additionally, we've also introduced the ability to remove the CDM from your copy of Firefox. We believe that these are important security and choice mechanisms that allow us to introduce this technology in a



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Text January 09, 2014 927 notes

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Things Cory Doctorow saw



Understanding the limits of markets AND state knowledge; integrating learning networks & diverse motivational and organizational models

Not only assuring competition in markets and efficiency, but also orienting regulatory interventions to cooperation in open commons to enable learning networks and communities of practice

Diversity, learning and knowledge flows, adaptation and resilience more important than optimization

Power and rent-extraction opportunities and practices continuously shift locus. Yesterday's victories become the battleground over tomorrow's leverage points

Maintaining an open society, creative learning networks, and robust innovation without losing social embeddedness requires continuous updating of the threats and solutions