

Chapter 10

YouTube Changes Everything: The Online Video Revolution

Liz Gannes

Abstract A group of Web startups is fundamentally altering how people, especially younger people, consume video content. The underlying cause is not just DVRs, time-shifting, and commercial-skipping. In just three years, because of the Internet, the nature of television consumption has changed dramatically.

This younger group is not comprised of passive consumers. They are multi-taskers, forum-chatters, mashup creators, and video stars themselves. Along with making the content personal, they are creating opportunities and challenges, while covering the costs of their entertainment with advertising.

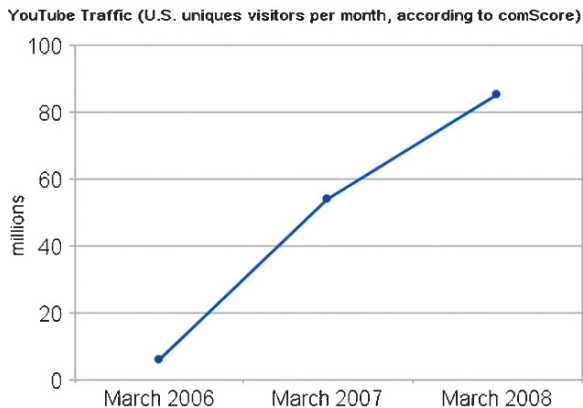
While the transition to this next generation of television watching is inevitable, it is not clear exactly how and when the new industry developments will mature. This paper examines the developments in the last three years to understand how this has come about.

YouTube, the most popular video site, with 35% share of streams, dominates the US market today.¹ The site's rise came on the back of its technology. YouTube's early premise was simple and groundbreaking: give users the ability to upload large video files and then send a link to their friends that would allow the videos to play directly in the friend's browser. This does not sound so crazy now, but getting this to work needed a huge effort.

The compelling nature of video content...silly clips just asking to be forwarded... like Saturday Night Live's Lazy Sunday and a home video depicting the "Evolution of Dance," drove more and more people to the site. YouTube's creators also did some very smart things: widgetizing their tools, making their video players embeddable on other Web pages, and tying into the popularity of personal expression sites like MySpace and blogs (Fig. 10.1).

From late 2005 to 2006 was a wild time in the world of Web video. Users uploaded anything and everything to YouTube, creating a sort of Library of Alexandria for all the world's movie and television content. YouTube was expected to flame out much like Napster, becoming yet another casualty in the arduous process of digitizing media. But then Google, the maverick, wealthy search company, stepped in and paid \$1.6 billion for YouTube. This occurred despite the fact

Fig. 10.1 YouTube traffic (US uniques visitors per month, according to comScore)



that Google Video was one of YouTube’s top three competitors, based on traffic. Google’s purchase of YouTube resulted in three developments:

1. It put an end to the uninhibited era of Web video
2. It instantly attracted lawsuits and payoffs to avoid lawsuits
3. It ensured that YouTube was going to be around for a long time

Google, which was not exactly big media’s best friend, tried to pave the way for its newly purchased company by partnering with media companies. They had some success with major labels, which enabled them to post music videos and license the use of songs in member videos. But that came at a price. Due to deals for equity in YouTube, Warner Music Group, Universal Music Group and Sony BMG received as much as \$50 million from Google, soon after the sale.²

NBC and CBS, along with thousands of smaller partners, started posting promotional clips to the site. Viacom sued for \$1 billion, claiming that the “DMCA safe harbor provision,” which YouTube and other sites used to protect themselves from copyright infringement liability arising from members uploading unauthorized content, was not valid.³

In a press release accompanying the lawsuit, Viacom asserted:

“YouTube is a significant, for-profit organization that has built a lucrative business out of exploiting the devotion of fans to others’ creative works in order to enrich itself and its corporate parent Google. Their business model, which is based on building traffic and selling advertising off of unlicensed content, is clearly illegal and is in obvious conflict with copyright laws. In fact, YouTube’s strategy has been to avoid taking proactive steps to curtail the infringement on its site, thus generating significant traffic and revenues for itself while shifting the entire burden – and high cost – of monitoring YouTube onto the victims of its infringement.”⁴

YouTube has maintained that it is not legally required to screen uploaded videos before they are available on the site and furthermore that it would be a significant hindrance to the site’s performance to do so. However, in the meantime, it has introduced tools to screen for copyrighted video, albeit only the video that copyright holders have provided to YouTube for the purposes of such tests.⁵

In a recent filing, Google argued that Viacom's seeking to hold carriers and hosting providers liable for online communications "threatens the way hundreds of millions of people legitimately exchange information, news, entertainment and political and artistic expression."⁶

That case is yet to reach trial, though a judge has ruled that Viacom cannot seek punitive damages.⁷

It is unclear to what extent YouTube was built on big media's back. Some argue copyright holders' concerns are overblown. In April 2007 an independent research firm found that only 5.93% of the site's 6,725 most-viewed videos over the previous three months were removed at copyright holders' request. The methodology was not perfect, but a proper study would have been impossible without the cooperation of YouTube.⁸

Once rationality came to the world of YouTube, the site realized its core resource was its community. An early set of lonely and creative souls had bonded together and made stars of each other, claiming a significant part of the huge audiences pouring into YouTube. Two years later, users like "Smosh"⁹ and "LisaNova"¹⁰ could easily claim one million views for every video they posted.

Another big portion of YouTube video is home videos, some of which will never find an audience and some of which hits a nerve or receives some fortuitous promotion, quickly climbing to the top of the charts. Yes, these are the oft-cited cats playing the piano and dogs riding skateboards. YouTube did offer a private option from early on, but public videos have always defined the site.

Sometimes user participation does not even involve turning on a camera. Video is an amazing tool of cultural commentary, and users used video editing to create mashups – for example, "Brokeback to the Future,"¹¹ with George Bush and Tony Blair spliced together to sing "Endless Love."¹²

Users were also able to quickly post raw footage of events they had witnessed simply because they were in the right place at the right time. Two young men being tasered by security officers for disorderly conduct at two different events, in a college library¹³ and at a political event,¹⁴ touched off widespread debate about the use of force. American soldiers in Iraq posted videos of themselves at work and at play. When Zinedine Zidane headbutted Marco Materazzi in the 2006 World Cup finals, barely anyone in the stadium noticed it except the referee, who gave him a red card, ejecting him from the final game of his storied career. But viewers who logged in online were quickly treated to replay after replay of the incident.¹⁵ Mashups became a part of this cycle too; "Don't Tase Me Bro" remixes¹⁶ and Zidane headbutt games and parodies¹⁷ flew across the Web. There are also some bizarre tendencies to over-share, such as when criminals post recordings of themselves committing crimes.

Though all these examples involve violence, they are not the whole story. Users have also made use of their personal broadcasting platform to advocate for causes they believe in and add to the public dialogue. An international politics student named James Kotecki at Georgetown even scored interviews conducted in his dorm room with the 2008 presidential nominee hopefuls Ron Paul and Mike Gravel, and video responses from the other candidates Dennis Kucinich, Mitt Romney, and Tom Tancredo.¹⁸ In addition, politicians are increasingly held to a much higher standard, as

their flip-flops and misspeaks can be juxtaposed and widely disseminated. YouTube is apolitical in its ability to spread such incidents far and wide. Some key examples from the recent primaries include Hillary Clinton being exposed for lying about the dangerousness of a visit in Bosnia¹⁹ and John McCain giving conflicting statements on all sorts of things.²⁰

On the flip side, good things come to those who embrace real-time politics. When Barack Obama gave an unusually long and cerebral speech on the issue of race, he posted the entire thing to YouTube (getting special permission to exceed the usual 10-min limit) and as of mid-June had received more than 4.5 million views.²¹

So far, while YouTube has democratized production and consumption in all sorts of interesting and increasingly impactful ways, it has missed the boat on professional content. Early on, big media companies felt threatened and challenged by the site's harboring copyright infringement and the feeling continues because YouTube is outsizing their online presences. Along the way, however, they realized that reaching their viewers online was not such a bad idea.

For instance, "Lazy Sunday," a short created by a team of three young writers who had actually been recruited to NBC's Saturday Night Live at least in part because of their online video resume, was an instant hit after being shown in the December 17, 2005 SNL episode. The two-and-a-half-minute video depicts Andy Samberg, one of the three writers, and fellow SNL cast member Chris Parnell rapping about going to see the movie "The Chronicles of Narnia." With geeky and irreverent exchanges like the one below, "Lazy Sunday" was a perfect fit for the Web:

Parnell: "Let's hit up Yahoo Maps to find the dopest route."

Samberg: "I prefer Mapquest."

Parnell: "That's a good one too."

Samberg: "Google Maps is the best."

Parnell: "True that."

Together: "Double true!"

The clip, taped by fans from their TV sets and posted to the Web, gained a far larger and broader audience on YouTube than it saw in its initial airing, a fact that can in part be attributed to a huge growth spurt on YouTube around the turn of 2006. Though "Lazy Sunday" was posted on multiple video sites, YouTube's version became the most popular one, drawing millions of views and holding the top search spot for "Lazy Sunday" on Google.

NBC was not quite sure what to do. The network eventually posted a version of "Lazy Sunday" on its own site, which barely had a video section at the time, and which did not work as reliably as YouTube. Then 2 months after the video had been initially aired, the network contacted YouTube to have unauthorized versions taken down. For a while fans fought back, reposting versions. But eventually, if you fight your fans long enough, they stop caring so much.

From June 2006 to October 2007, NBC got into the action with a YouTube channel of its own for posting short, promotional clips.²² But in late 2007 the network pulled all its content from the site again as it prepared to compete with YouTube by launching Hulu, a video aggregator of its own (<http://newteevee.com/2007/10/22/nbc-confirms-pulling-youtube-content-for-hulu/>).

Today, at least within the United States, “Lazy Sunday” is easy to find and watch on Hulu, a joint venture of FOX and NBC. The site is a direct descendant of YouTube, but with its parental support it has access to massive libraries of premium content. However, to simplify the licensing process, the content is geo-blocked against international users.

Good, established content is a sure way to lure viewers. Hulu used, and expanded upon, the principles of simple, accessible, shareable Web video and added content, initially from its parents, FOX and NBC and eventually from other partners. According to Nielsen, Hulu broke into the top ten US video sites in its second month of public availability (<http://newteevee.com/2008/05/20/hulu-leads-network-sites-adds-partners/>).

Perhaps the biggest surprise of this latest post-YouTube era was how quickly viewers were willing to change their habits. Give them access to TV programmes where and when they want it and they will come running. In October 2007, before the launch of Hulu, TNS and a Conference Board survey found that 16% of American Internet households watch TV broadcasts online (Fig. 10.2).²³

There is no way around it: the past few years have witnessed the birth of a new mode of content consumption. This introduces significant questions about changing economics – after all, US broadcast television advertising alone was worth \$45 billion in 2007,²⁴ while online video advertising was worth \$471 million according to one estimate.²⁵

But we will get to advertising in a minute. Meanwhile, the amount of traffic other video sites have is a testament to how game-changing this phenomenon is. It is almost correct to tell this as the story of YouTube, but there are still many other sites attracting communities of their own and pushing boundaries in ways such

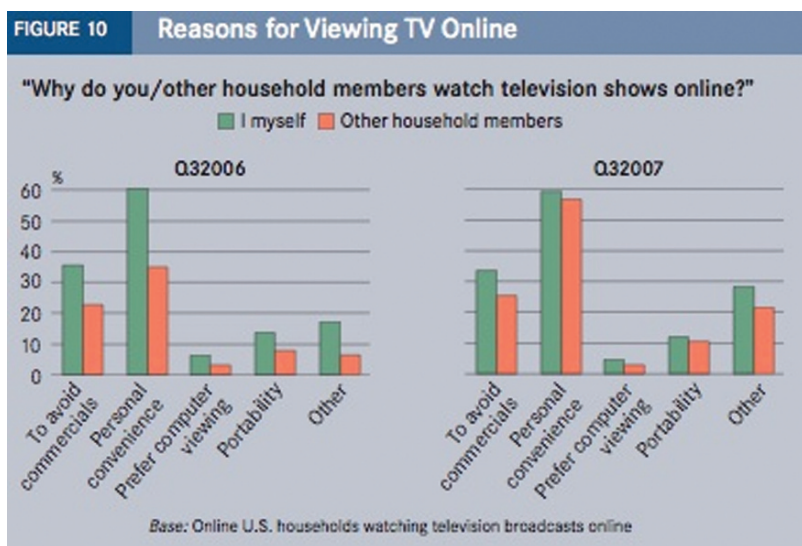


Fig. 10.2 Reasons for viewing TV online

ONLINE VIDEO PORTAL STARTUPS				
Startup	Funding	Investors	Traffic	Exit
YouTube	\$11.5 million	Sequoia Capital	66 million*	Sold to Google for \$1.65 billion in October 2006
Metacafe	\$45 million	Highland Capital Partners, DAG Ventures, Accel Partners and Benchmark Capital	5.9 million	
Dailymotion	\$43.5 million	Advent Venture Partners, AGF Private Equity, Atlas Venture and Partech International	5.7 million	
Veoh	\$69.5 million	Intel Capital, Adobe Systems Inc., Gordon Crawford, Shelter Capital, Spark Capital, Goldman Sachs, Michael Eisner's Tornante Company, Time Warner Investments and Jonathan Dolgen	4.3 million	
Heavy.com	\$28 million	Polaris Venture Partners, Jacobson Investments	4.2 million	
Grouper/Crackle	\$5.25 million	Deutsche Telecom's T-Online	2.5 million	Sold for \$65 million to Sony Pictures Entertainment in August 2006
Break.com	\$21 million	Lionsgate	1.9 million	
Atom Films	unknown	Sequoia Capital	1.9 million	Bought by Viacom's MTV Networks for \$200 million in August 2006
Hulu	\$100 million	Providence Equity Partners	1.8 million	
Revver	\$12.7 million	Comcast Interactive Capital, Turner, Draper Fisher Jurvetson, Bessemer Venture Partners, Draper Richards and William Randolph Hearst III	.76 million	Sold for under \$5 million to LiveUniverse in February 2008
Vuze	\$34 million	New Enterprise Associates, BV Capital, Greycroft Partners and Redpoint Ventures	.42 million**	
Joost	\$45 million	Sequoia Capital, Index Ventures, Viacom, CBS, Li Ka-shing, Janus Friis and Niklas Zennström	.18 million**	
Babelgum	\$13.2 million plus potentially \$130 million more	Silvio Scaglia	.17 million**	
TidalTV	\$15 million	New Enterprise Associates, Valhalla Partners	too small to measure	
IFILM	at least \$10 million	Axiom Ventures, Eastman Kodak Company, Sony Pictures Entertainment, Vulcan Ventures, Baroda Ventures, Falcon Cable Founder, Marc Nathanson, Leo Hindery and Yahoo!	now redirected to Spike.com	Bought by Viacom's MTV Networks for \$49 million in October 2005

*This is smaller than other numbers quoted because comScore now breaks out video viewers as well as unique visitors, so many people watch YouTube (and other sites) through embedded video around the web

**These sites mainly interact with their users through downloaded software, so it makes sense that they'd have less web traffic

Fig. 10.3 Online video portal startups

as paying their users, scoring original Web content, and seeking out rewarding verticals. Of course, a lack of profits will necessarily catch up with many of these venture-backed sites (Fig. 10.3).

Among the many other consumer-facing areas of online video innovation, such as video search and social video discovery, the backend technologies are actually getting the most attention, and they deserve it. Transmitting video is no easy feat, and it is getting expensive.

For instance, Move Networks, which powers video distribution for FOX, ABC, and ESPN, has got wide distribution despite its requiring end users to download a piece of software that is an alternative to the widely adopted Adobe Flash. Move says it expects to have it installed by 65 million of its software clients by the end of this year, and it is seeing average viewer sessions of 50 min an hour. By using techniques like caching and finding the best prices it can get from various content delivery networks, Move has brought the cost of transmitting a gig to less than \$0.10. The company has raised \$67.3 million from Cisco, Comcast Interactive Media, Televisa, Steamboat Ventures, and Hummer Winblad Venture Partners. And it has many competitors, including Maven Networks (acquired by Yahoo), the Platform (acquired by Comcast), Brightcove, Delve Networks, Vusion, and GridNetworks.

What is next for online video? Certainly the continuing expansion of trends like online television watching, real-time politics, and viral video phenomena is to be expected. Around the corner, a new group of companies are working to professionalize the creation of Internet content. By using their knowledge of how the Web works, finding niches, and fostering interactive communities, companies like Next New Networks, EQAL, JibJab and Revision3 are showing that new media can actually be quite different from old media. With this new body of knowledge, they may well scoot ahead of video portals as next in line to be acquired by old media dogs looking to learn new tricks. EQAL, for instance, which created the innovative “lonelygirl15” series, already has a “first look” and consulting deal with CBS.²⁶

These new content companies embed their content within the online and offline contexts fans already inhabit – for instance, turning fiction into a game that meshes with reality by having viewers help characters solve a puzzle, giving watchers tools to place their own faces on the dancing figures in a silly video, enlisting stars to appear in extra online bonus footage, or incorporating fan submissions into an episode’s script. These new avenues for viewer engagement are endemic online, but they have no problem fitting into traditional television as well: for example, in situations such as “American Idol” text message voting, “The Office” blogs and Webisodes, and TV news reporters collaborating with viewers to gather details and videos about a local event.

New media, however, still faces a major revenue gap, especially considering its viewers are the most savvy and perhaps least willing to sit through commercials. Unfortunately, while low-budget productions have their converts, creativity and efficiency mix about as well as oil and water.

Among the potential revenue options are new ad units, often called overlays or in-video ads, which occur within a video player. These depend on a user clicking to

activate them. Often they are priced on a performance basis – meaning advertisers only pay if users take an action. The assumption is that people who choose to view the unit are far more engaged with it. Just about every vendor offers such ad units, and they have been approved by the Interactive Advertising Bureau.²⁷

Another area of exploration is ad targeting – utilizing information about the nature of a piece of content, or a viewer’s location, stated demographics or behavior to show more relevant ads. YouTube even has a program that allows advertisers to target content as it is taking off among its viewership, allowing them to be associated with whatever is going viral on the site at that moment.²⁸ In addition, advertisers and content makers are experimenting with combining their efforts through product placement and integration, user-generated advertising contests, and brand community portals. Some representative video advertising startups include Broadband Enterprises, YuMe, and BrightRoll (video ad networks); Adap.tv (video ad optimization); ScanScout and Digitalsmiths (video ad targeting), Vitruve and Reality Digital (brand-centric communities), and Jivox (small business video ad creation and distribution).

For the moment, the most lucrative approach remains brand advertising – bringing the names everyone has heard a million times to this new mass medium. This is especially problematic for user-generated content, of which major advertisers remain wary. But in an online video world that is continually dominated by the meme of the moment, which, often as not, comes from a new source, this leaves out a huge portion of the viewership. User-generated content is not always a tour of a kitchen remodel suitable for an audience of one, or a bootleg copy of Comedy Central’s “The Daily Show with John Stewart.” It may just be the new, previously completely unknown, touch point for a million water cooler discussions.

Meanwhile, it is not as if traditional media has tremendous security in its own revenue streams. The process of evolving to best serve and monetize viewers will inevitably be a learning process across all platforms.

Lastly, the next big frontier is bringing Internet content to wherever people want to view it. That includes mobile devices, but is primarily about those big-screen TVs so many people have installed as a focal point in their homes. Improving upon the expensive and complicated setups of the past, a new group of devices and software seek to get content that is transmitted over the Web in front of the comfortable sofa. It may be that such devices will be less important for future generations, who happily watch their laptop screens, but for now they are an important part of bringing online video mainstream. Look for new solutions such as Internet-connected set-top boxes and televisions, wireless transmitters, and next-generation routers. Some names on this list: the Apple TV, Netflix and its consumer electronics partners, the Sony Bravia Internet Video Link, the HP MediaSmart, Panasonic VieraSmart, Verismo, Vudu, Xbox, ZeeVee, and of course TiVo.

It is hard to believe that YouTube was founded in February 2005, just a little over three years before the writing of this chapter. The average US online video watcher now streams 235 min of video per month!²⁹ But as there is so much left to figure out, the next three years will not be boring either.

Notes

1. <http://www.comscore.com/press/release.asp?press=2268>
2. <http://www.nytimes.com/2006/10/19/technology/19net.html?ex=1318910400&en=fb18406e3a1e91dd&ei=5088&partner=rssnyt&emc=rss>
3. <http://wsj.com/public/resources/documents/ViacomYouTubeComplaint3-12-07.pdf>
4. <http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/03-13-2007/0004545033&EDATE=>
5. <http://newteevee.com/2007/10/15/youtube-finally-launches-video-id-tool/>
6. http://news.yahoo.com/s/ap/20080526/ap_on_hi_te/youtube_lawsuit;_ylt=AuZ6K9BjHrnLoD17idGCjK4jtBAF
7. <http://docs.justia.com/cases/federal/district-courts/new-york/nysdce/1:2007cv02103/302164/95/>
8. http://www.vidmeter.com/i/vidmeter_copyright_report.pdf
9. <http://www.youtube.com/user/smosh>
10. <http://www.youtube.com/user/LisaNova>
11. <http://www.youtube.com/watch?v=zfODSPIYwpQ>
12. <http://www.youtube.com/watch?v=nupdcGwIG-g>
13. <http://www.youtube.com/watch?v=AyvrqcxNIFs>
14. <http://www.youtube.com/watch?v=6bVa6jn4rpE>
15. <http://www.youtube.com/watch?v=vF4iWIE77Ts>
16. <http://www.youtube.com/watch?v=AkMkGOpAF4s>
17. <http://www.dashes.com/anil/2006/07/zidane-world-cu.html>
18. <http://www.youtube.com/emergencycheese>
19. <http://www.youtube.com/watch?v=8BfNqhV5hg4>
20. <http://www.youtube.com/watch?v=GEtZIR3zp4c&e>
21. <http://www.youtube.com/watch?v=pWe7wTVbLUU>
22. http://www.youtube.com/press_room_entry?entry=c0g5-NsDdJQ
23. <http://newteevee.com/2007/10/15/more-people-watching-tv-shows-online/>
24. http://www.tvb.org/rcentral/adrevenue/rack/revenue/2007/ad_figures_1.asp
25. <http://www.jupiterresearch.com/bin/item.pl/research:concept/1215/id=99419>
26. <http://newteevee.com/2008/05/14/cbs-will-lonelygirlize-its-tv-shows/>
27. <http://newteevee.com/2008/05/05/iab-approves-new-video-ad-formats/>
28. <http://newteevee.com/2008/05/13/youtube-targets-ads-to-vids-about-to-go-viral/>
29. <http://www.comscore.com/press/release.asp?press=2223>