

**RAPID CHANGE IN THE ENTERTAINMENT  
INDUSTRY OPENS DOORS FOR A NEW  
GENERATION OF MEDIA DEVELOPERS**

White Paper

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June 25, 2013

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## EXECUTIVE SUMMARY

The television and motion picture industries are in a state of rapid change. New technologies that stream video to the home living room or den, like Roku and Apple TV, are bypassing traditional broadcast and cable television networks and programmers. Streaming content providers like Netflix and Amazon have nearly ended sales of movie DVDs. Viewer behavior influenced by common Internet practices favors TV viewing choice, including downloading and viewing content at any time. This state of flux in the entertainment industry provides new opportunities to media producers and content developers. They will find willing viewers and wide-open technology pipelines eager to accept high-quality content from new creative sources.

# INTRODUCTION

The mass entertainment industry, Hollywood movies and TV, is in a state of flux bordering on crisis. A number of events have formed a confluence of change in the entertainment industry, change that has become very visible in 2013.

The main disrupters to the film and television industries are acquisition and viewing behaviors learned from the Internet, especially on-demand downloads and streaming of media.

Other key factors effecting change in the entertainment industry are:

- The dominance of Netflix in media distribution
- The rise of Roku and other Internet streaming services
- The catastrophic loss of motion picture income from DVD sales
- The popularity of high-definition wide-screen TVs in the home
- The popular and financial success of long-form television programming

This state of crisis brings with it opportunity. The confluence of change in the entertainment industry is driven by changing audience behaviors. This opens doors to new enterprises, which can stake a prominent position in advertising as well as media content creation and distribution, matching audience expectations with new modes of programming, new kinds of shows, and new ways to advertise that audiences are comfortable with.

# INTERNET BEHAVIORS

## The YouTube Effect

When YouTube was released in 2005, users immediately found something brand-new: they could reach through their computer screen with their mouse and create their own TV programming. They didn't need a cable channel to do that, or a broadcast network. They didn't need any of that any more. YouTube gives the user the ultimate in choice; content is not chosen for them or programmed by someone else. Each user can do it by themselves, with just a computer, a mouse, and the Internet.

The new thing that the user of YouTube discovered was disintermediation: no company or expert was mediating the shows or programming. No channel or network was choosing a program for them, and the time when it was shown. There was no advertising to interfere with the flow of the shows, which were created and uploaded to YouTube by other users like themselves.

## Internet Behavior

The Internet effect is to provide everything all at once all the time. The Internet also acts as an acid, which erodes barriers, whether they are financial, cultural, physical, or business barriers. If a television show or movie is available on the Internet, then there is no barrier to someone downloading it, and viewing it whenever they want.

The behavior of binge consumption is already marked in culture: when a reader finds a good book and loves it, they might read it again immediately. They will listen to their latest favorite song over and over, or go back and see a hit film 30 times. Streaming media technology normalizes this already-extant behavior to television viewing. Now the viewer can binge-watch all the episodes of a show at once, or play their favorite episode over and over, whenever they want, without a cost penalty.

## Netflix and Roku

When applying this to the confluence of change now upon the entertainment industry, Netflix and Roku are amplifying and multiplying Internet behavior by disintermediating broadcast and cable television. User behaviors that have become commonplace on the Internet, downloading songs at will and posting do-it-yourself videos on YouTube, now include the expectation to download and watch on-demand feature films, shows, or episodes at will, just as users already download a song for instant consumption, or at any time they choose.

Netflix, coupled with Roku and other streaming services, get out of the way of viewers, who are frustrated with what seems to them old-fashioned restrictions and entrenched business practices of broadcast television and cable. The breakdown of barriers to content and distribution opens new avenues for content to reach the viewer, with none of the conventional industry restrictions.

## Internet TV Enables Desire

Computing pioneer Alan Kay said: "Steve understands desire," about late Apple CEO Steve Jobs, upon the release of the iPhone in 2007.<sup>1</sup>

Apple as an organization anticipates consumer desire; it looks into the future, organizes its teams to envision and materialize the anticipation of the crowd, and provides a great experience that fulfills their desire.

The Internet has changed the behavior of desire: when someone decides they want a document, video, or song, with the Internet they can have it immediately. The Internet encourages instant gratification. With Netflix and Roku, the television viewer can find something they want to watch and initiate its download immediately. Netflix and Roku engage with audience desire, applied to TV and movies.

Consumer behavior has changed, and television viewing behavior has changed. The viewer wants it NOW. Netflix/Roku meet the viewer with technology they understand and are comfortable with. Netflix/Roku allow the viewer to select and view the content they want, when they want it.

# NETFLIX

## Netflix Dominates Internet Activity

Netflix is the most significant content-delivery player on the Internet:

Netflix today receives nearly a third of all Web traffic in North America, has more subscribers than Time Warner's HBO and streamed more than 4 billion hours of video worldwide in the first quarter, more than double the 1 billion hours from a year earlier.<sup>2</sup>

A consortium of manufacturers introduced the DVD format in 1997, and home DVD players began to sell quickly. Netflix immediately established itself in 1997 as the anti-video store, mailing DVDs to home viewers who ordered them online – and never charging late fees. While each disk took a couple of days to reach the viewer's address by mail, the convenience of the system, the choice of movies and TV shows, and a policy of no late fees made Netflix a roaring success. The disruptive success of Netflix helped kill off Blockbuster, Hollywood Video, and mom-and-pop video stores.<sup>3</sup>

## Internet Downloads

Ten years later, in February 2007, Netflix debuted its Internet download service. Customers could now select a film or TV show and watch it almost immediately, without having to wait for the DVD to arrive in the mail.<sup>4</sup>

On February 1, 2013 Netflix simultaneously released all 13 episodes of a new show it had commissioned, *House of Cards*, available for download or streaming. Netflix made the *House of Cards* series available all at once so viewers could stream and watch one episode, three episodes an evening, or binge and watch all of them in a marathon session. This meets the expectations for freedom and choice that Internet behavior encourages.

*House of Cards* recognized a new behavior of media consumption: Netflix simply released the show. There was no artificial staging or programming or finding the right night to position it. By releasing all the episodes at once, Netflix met the *desire* of viewers for quality content, and the *behavior* of viewers to watch on-demand shows at a time of their choosing.

## End of the Season

Netflix has killed off the notion of the “season,” a holdover from broadcast TV. *House of Cards* has shown that the traditional TV season fails to hold continued meaning for viewers with streaming services. Cable had already made an absurdity of seasons, by broadcasting a popular show whenever it was ready and calling it a “fall” show or a “spring” show, whether they broadcast it at the beginning of the fall, middle of the fall, or in winter.

Cable made its big break from traditional programming with the introduction of round-the-clock-news in 1980: CNN. CNN showed that television could succeed without artificial time constrictions borrowed from the physical world, such as a Summer Rerun “season” when kids were home from school and serious shows were wasted. The news was always available, whenever the viewer chose to sit down to watch it.

The television season has also become less meaningful with the popularity of long-form content on cable. It takes more time and more money to create a new group of high-quality episodes of a novelistic show like *The Sopranos* or *Breaking Bad*, and the cable channels release each carefully-prepared “season” a year apart.

After the surprising popularity of the first “season” of the hit *Game of Thrones* on HBO, the show producers had to reassemble the cast, re-ramp-up production, and make another season, to be shown a year later.

Netflix released their next show, the revival of *Arrested Development*, on May 25, 2013, all 15 episodes together, further departing from the notion of the “season.” On the streaming platform like Netflix or Apple TV, cable and broadcast network barriers are gone – and so are the old network-style pricing structures.

Netflix’s pricing structure for content downloads is extremely low: the \$7.99 monthly charge for the entire Netflix catalog includes *Arrested Development* Season 6, as well as their other original programming. Internet-style choice, and Internet-style freedom, have broken down old pricing structures. Advertising must change if it is to accommodate this new model of pricing as well as distribution, opening up opportunities for advertisers to meet viewers in new ways, following Internet usage as a guide.



# ROKU, APPLE TV AND THE STREAMERS

## High-Def Signal Establishes Streaming

Netflix executives launched Roku in 2002 to stream movies from the Netflix catalog. By 2013 viewers had streamed shows 8 billion times from Roku – far exceeding other streaming video services.<sup>5</sup>

Higher-end Roku and other streaming devices, like Apple TV, stream content in high-definition, a signal that carries shows in 1080p (1080 pixels horizontally) and 5-channel audio. The HD content fulfills the potential of 1080p HDTV screens at home.<sup>6</sup>

Roku is the most significant of the TV streaming systems, due to its number of streams; its Netflix provenance; and its success in providing an outlet for more quantity and quality channels. As of this writing, 800 channels are available for viewing on Roku.

Based on available industry data, (Apple and Roku) are the number one and number two selling \$99 boxes in the market today. It's no wonder considering both boxes come loaded with features including HDMI out, Wi-Fi, an Ethernet jack and support for surround sound and 1080p video. Both boxes are about the same in size and consume very little in the way of power and both have HMDI to support connections to newer TVs...

Roku has an open SDK and as a result, has a lot of content partners working to bring more channels to Roku devices.<sup>7</sup>

In addition to three channels for the Netflix catalog, Roku streams such blue-ribbon or popular media outlets as CNN, BBC News, Aljazeera News, Vimeo, HBO GO, Disney, the TED Talks, Bloomberg News, Hulu, Vudu, PBS, Reuters, Fox News and Fox Business, and NBC News.

Also available on Roku are:

- MLB.TV
- NBA
- NHL Game Center
- EPIX
- Amazon Instant Video
- Major League Soccer
- UFC TV
- CNBC
- AOL HD
- Pandora
- Crackle
- Flickr
- PLEX

With Roku and the other streaming video services, users can program their own entertainment or news consumption in the same way as they use YouTube, but with a high-def streaming signal that is much better quality than YouTube. Users can create their own

programming, watch what they want when they want it; and can also watch movies. On Roku, movies are in cinematic quality high-def, with 5-channel audio.

Roku users watch about 12 hours of video on their devices each week — which means that's probably 12 hours less traditional TV they're watching. If for nothing else but fear of their losing audience, traditional content providers understand that being on Roku and other streaming platforms will be increasingly important as viewer attention becomes ever-more fragmented.<sup>8</sup>

### **The Changing Behavior of Distribution**

Roku and other streaming devices like Apple TV are a new kind of TV distribution, actually an Internet appliance that allows the viewer to search and view content they want on their TV, via the Internet. The streamers provide the content at the highest quality. This brings the Internet's always-available content to a high-quality viewing experience.

# HOLLYWOOD LOSES DVD INCOME

## DVD Revenue Lost to Internet Downloading

By 2008 sales of DVDs made up to 50% of the revenue stream for top-earning Hollywood films. Since that peak year, the film industry's revenue stream from sales of DVDs has drastically diminished, due to Internet downloading and streaming of films and television shows, including on Netflix.<sup>9 10</sup>

Former Hollywood film producer Lynda Obst interviewed Peter Chernin for her 2013 book *Sleepless in Hollywood*. Chernin is chairman and CEO, The Chernin Group, former president and chief operating officer of News Corporation, and former president and chief operating officer of Fox, including Twentieth Century Fox Film and Twentieth Century Fox Television. This quote is from an excerpt of *Sleepless in Hollywood* that appeared in Salon.com, June 15, 2013:

“The movie business,” Peter said, “the historical studio business, if you put all the studios together, runs at about a ten percent profit margin. For every billion dollars in revenue, they make a hundred million dollars in profits...

“The DVD business represented fifty percent of their profits. The decline of that business means their entire profit could come down between forty and fifty percent for new movies.”<sup>11</sup>

This has happened in much the same way that music downloads – free MP3s on Napster, and through paid services like iTunes – killed the music CD. The manufactured movie DVD, like the music CD, was highly profitable for Hollywood studios, compared to Internet downloads which generate miniscule profits over their very low margins.

## Studios Pivot to the Spectacle

Hollywood studio films have become massively more expensive as the studios try to create market-sweeping hits with each big release, placing high-salaried stars in films with complex special effects.<sup>12</sup>

In a May 2013 interview, industry leaders George Lucas and Steven Spielberg, predicted that public films will become more like attending a Broadway production, or an NFL game, in ticket structure and participation commitment.

Spielberg said, “You’re at the point right now where a studio would rather invest \$250 million in one film for a real shot at the brass ring, than make a whole bunch of really interesting, deeply personal — and even maybe historical — projects that may get lost in the shuffle because there’s only 24 hours.”<sup>13</sup>

The expectations of Hollywood film studios for earnings has moved the industry to the event blockbuster, the special effects spectacle, and new projection technologies that cannot be duplicated in the home theater. The 2013 release of special effects-heavy *World War Z* has cost an estimated \$200 million. Costs for the 2013 releases *The Lone Ranger* and *47 Ronin* are rumored to be \$250 million and \$225 million respectively. Recent studio effects films *John Carter* cost \$250 million, and *Battleship*, \$220 million.<sup>14</sup>

The resurgence of 3-D movies, starting with the blockbuster *Avatar*, was one solution to attracting audiences away from the home theater. The use of 48-frames-per-second to record and project the 2012 release of *The Hobbit*, twice the normal frame rate for cinema, is another way to create a unique – and higher priced – experience in the public theater.

According to Lucas and Spielberg, theaters and distribution will change to accommodate new spectacles. Independent films and low-budget art films, however, and foreign movies, adult-themed films, adaptations of novels and historical books, will disappear from the public theater.

George Lucas said, “What you’re going to end up with is fewer theaters. Bigger theaters, with a lot of nice things. Going to the movies is going to cost you 50 bucks, maybe 100. Maybe 150... And that’s going to be what we call ‘the movie business.’ But everything else is going to look more like cable television on TiVo.

“It’s not going to have cable or broadcast,” Lucas said. “It’s going to be the internet television.”<sup>15</sup>

## THE CINEMA AT HOME

### Output Device Quality

The success of high-def streaming services like Roku is partly due to the widespread adoption of high-def wide-screen television monitors. Pioneer released the first consumer large digital flat screen TV in 1997, a 42-inch plasma. By definition, high-definition television, HDTV, can show a video signal at a minimum of 1080p.<sup>16</sup>

For viewers who watch a streaming movie on a big screen, a wide LCD or plasma monitor in their home theater, living room, or den, streamed high-def movies and shows look cinematic. Where YouTube showed the way, that TV viewers can do this themselves without needing a channel or a broadcaster to do it for them, now with the high-def streaming services viewers can do all that but at a much higher level. They have cinema quality at home.

It is a truism that the quality of media is restricted only by the quality of its output device. For graphics, the printed page of a book was the highest quality of “output” since the origin of the printing press in the 15<sup>th</sup> century. Computer printers have greatly increased in quality since their introduction in the 1970s, to the point that their output is nearly indistinguishable from printed, bound books.

Likewise, digital monitor technology has increased in quality to the point where image quality is as fine and detailed as projected 35mm film in the cinema. Home digital monitors have become a standard that the critical viewer holds against the projected image in the movie theater, with the home screen often beating the cinema experience.

Newer HDTV screens have more pixels per inch, and can show even higher definition rates with greater detail. TVs with 4k screens, showing four times the pixels as HDTV, are arriving in summer 2013. The high-quality video image, from 1080p on up, is superior to the quality of the signal delivered by cable or broadcast television, which do not meet the display potential of high-def screens.

When home viewers watch a DVD or streaming high-def video from Roku, they can see the full nature of their screen’s quality. By providing ease of selecting, accessing, and downloading high-def media from the Internet, Roku helps fill the potential of latently spectacular home theaters.

### Viewers Desire High Quality Image at Home

Home TV viewers desire a better quality viewing experience, with content to match the quality of their large high-def TV screen. The shift in customer behavior to Netflix downloads and Roku high-def streaming is motivated by convenience, but also indicates a preference for a better signal than cable or broadcast can provide.

This marks a viewer-oriented, consumer-benefit shift in the quality of content offered for playback on the home television. The Hollywood studios create and deliver their content in high-def, and the home viewer can now acquire and consume the high-def product, delivered by Netflix or Hulu, streamed over the Internet through a Roku or Apple TV device.

## CINEMA MOVES TO TELEVISION

### *The Sopranos* Meets On-Demand

Popular cable programs have developed long-running plot structures and in-depth character development, supported by the fee structure of cable delivery as well as advertising, and sustained by the fierce loyalty of viewers. As Hollywood's financial challenges drive the studios to ever-more-expensive and spectacular theater offerings, deeper, more artistic, complex or adult-themed cinema is moving to the home screen.

Chief among the long-form shows has been *The Sopranos*, about a troubled organized crime family, which set the standard for deeply-written, novelistic character and story development. *The Sopranos* ran from 1999-2007 on HBO, 86 episodes over six seasons, and won 25 Emmys and five Golden Globes.<sup>17</sup>

The critical and popular success of *The Sopranos* affirmed the format for cable show producers. It opened the gateway for many popular and critically-acclaimed long-form shows, including:

- *The Wire* (HBO), 2002-2008, five seasons, 60 episodes
- *Battlestar Galactica* (Sci-Fi Channel), 2003-2009
- *Deadwood* (HBO), 2004-2006
- *Breaking Bad* (AMC), 2008-2013
- *The Walking Dead* (AMC), 2010-present
- *Game of Thrones* (HBO), 2011-present

These big-budget shows, well-written, produced, directed, and acted, are shot in cinema-level film or digital video. The cable signal that delivers them, however, cannot bring the quality of the shows to the home TV screen. Another issue with the long-form format is that the shows are difficult for viewers to keep up with as each episode is distributed each week on cable or broadcast. The novelistic plot development, with many different characters coming and going, lends itself instead to viewers setting up and watching an episode, or more, when they have the time to focus on it. The DVD, digital video recorder, Internet download, or streaming are more convenient and appropriate methods for viewers to consume long-form content.

The combination of download services like Netflix and high-def Internet television streamers like Roku can deliver long-form shows in their original quality, bringing epic cinema to the home screen in cinematic quality, when the viewer wants to see it. This form of distribution meets the *desire* of the home viewer for high quality shows on their high quality screens at a time of their choosing – a promise that cable and broadcast cannot keep.

## SOMETHING NEW

### The Changing Behavior Of Creation

In the fast-changing entertainment world of streaming media, unknown elements include the impact of independent video, and how to handle advertising on a Roku channel.

Independent, do-it-yourself digital video is a wild card, an unknown. Sometimes it seems everyone is making videos, using their smartphones and handy digicams. In summer 2013, mini-video apps are appearing everywhere, from the 6-second Vine for the smartphone, to snapshot videos on Instagram and Facebook. There is a low barrier for anyone to make a video and share it on the Internet, with YouTube and Vimeo ready to accept whatever users upload.

The potential of independent video is affected by a couple of factors. One is the proliferation of HDTV screens. A film or video shot in a high-def looks great on these screens, including footage that gifted but non-professional viewers shoot themselves.

In addition, digital video cameras, and digital non-linear editing on a desktop computer, bring sophisticated filmmaking tools to those willing to make a commitment to learn how to use them. With a high-def digital handycam, indie filmmakers can shoot a movie and edit it on a computer. Distribution is through YouTube, or a personal channel on Vimeo, which streams over the Internet on Roku.

### User-Created High-Def Content

It is difficult to create and stream a channel on Roku. Roku makes its open SDK (software developer kit) available to channels, but to convert a show and stream it on Roku demands high-level programming skills.

While there is a high threshold to setting up an independent Roku channel, streamers are able to view Vimeo in high-def on their HDTV. Vimeo streams in high-def on Roku, and is easy to access. Independent filmmakers can upload a video to Vimeo, play it back on Roku, and view it on the big-screen LCD TV in the living room. If the film is well shot, it looks cinematic.

This is another aspect of the Internet effect, which like Napster, Netflix, and other disruptive players, is user-driven. Users who make indie high-def videos can post unique, interesting content on Vimeo, to be viewed on HDTV via Roku.

As Lucas painted it, the shift will present new opportunities both for consumers and filmmakers. Viewers will have access to a wide variety of programming, “usually more interesting than what you’re going to see in the movie theater. And you can get it whenever you want, and it’s going to be niche-marketed, which means you can really take chances and do things if you can figure out there’s a small group of people that will kind of react to it.”<sup>18</sup>

### TV Advertising Meets Internet Behavior

Netflix leads the corporate behavior change in advertising as well as in distribution of content. Netflix has no advertising in its hit releases *Arrested Development* or *House of Cards*.

This matches acknowledged viewer behavior: viewers hate commercials that interrupt a program they like and want to watch.

Viewers hate TV ads. No one watches TV for the commercials. Viewers have never adapted to advertising on television. Television viewers have used many schemes to avoid ads, including watching ad-free channels like PBS, muting ads with the remote control; or using Tivo and other DVR systems to record their favorite programs while filtering out the ads, so they can watch them ad-free at a time of their choosing.<sup>19</sup>

Netflix wins: it has no ads.

On the Internet, the advertising success story is Google. Google's total advertising revenues were \$42.5 billion in 2012. Its AdWords offering, which provides advertising space on the search page that relates to a user's search terms, is relevant, unobtrusive, useful, and lucrative.

Google's search interface provides contextual ads that are un-distracting and un-irritating to the user, and potentially useful to them. Premium ad space in the search interface is for a few thumbnail boxes, at the top of each search page. Bargain ad space is listed below the boxes in plain-type links.

Google wins: its advertising model works for the user and for the advertiser.

If Roku is to provide a new kind of TV for a new audience with built-in Internet behaviors, its advertising model could take a lesson from Google, and be unobtrusive while useful.

Roku has an interface: the navigation screen that each channel provides for viewers to select the show or episode they want to watch. This is wide-open space to display Google-type premium thumbnail ads and affordable plain-text ads.



## CONCLUSION

Viewer behavior changes driven by interaction with media on the Internet, accessible high quality programming, and the wide ownership of high-def home screens, are being met by changes in how television programming is delivered.

This confluence of change is structural, flowing through the highest levels of the entertainment industry. At the content level, where networks, studios, and channels produce actual shows, the structural changes have opened bright opportunities for new kinds of networks to develop new kinds of shows.

Learning from the Internet, these new networks can also provide space for advertisers – continuing to bring revenue to both network and advertiser through viewer interactions with the content. The potential new television enterprise is one that provides a platform for unique, high-value content to be distributed for viewers to use when they want to, linked to advertising in a way that viewers like.

## AUTHOR

Gregory M. Kerwin is a technology consultant, writer and published author. A widely-traveled filmmaker and media producer, he has directed documentaries, commercials and music video.

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## APPENDIX

### Nielsen now measures TV and Internet video viewing combined

August 2012: 114.2 million TV households in US (Nielsen)

<http://www.bloomberg.com/news/2012-09-25/nielsen-cuts-u-s-tv-homes-by-500-000-on-census-shift-to-web.html>

### Nielsen calls homes with no cable Zero TV homes

Nielsen now includes Zero TV Households in their measured samples for the 2013-2014 “season.”

-Media and Entertainment Report

March 8, 2013

### Hot Trends

Nielsen Media and Entertainment Report

September 30, 2010

- Bigger and Better TVs  
Upgraded television sets in the form of bigger screen sizes larger than 41 inches and better resolution continue to outfit in-home theaters. Specifically, HDTV sets have increased 26.9% and LCD flat screens are up 48.2% from Q3 2008 to Q2 2010.
- Home Internet Access  
Internet and broadband access in the home continues to rise – up 2.5% and 3.8%, respectively between Q1 2010 and Q2 2010. Currently, 85.3% of Americans have some kind of Internet access either through home and/or work.
- Home Wi-Fi  
The freedom of untethered connectivity helps the trend to go wireless continue. Having a wireless network in the home increased 8.2% from Q1 2010 to Q2 2010 and 24% over eight quarters.
- Digital Video Recorders  
Demanding schedules have made time-shifted viewing a must-have for 40% of U.S. homes who currently have a DVR device. And DVR adoption continues, increasing 14.5% from Q1 2010 to Q2 2010.
- MP3 Players  
Almost half (46%) of all U.S. homes now have at least one MP3 Player. Apple's iPod is still the dominant player in this category, capturing 63% of all MP3 Player-owning households.
- Apple iPad  
The Apple iPad launched on April 3, 2010, and was added to the Nielsen Home Technology Report survey shortly thereafter (May 2010). According to the Q2 report, 3.6% of U.S. homes now own an iPad and this hot trend will be closely followed.

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June 15, 2013

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<sup>17</sup> “*The Sopranos*”

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<sup>18</sup> The Verge, “Steven Spielberg and George Lucas predict ‘massive implosion’”

<sup>19</sup> “AdWords”

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