White Paper

# "It Came to Me in a Stream..." The Upward Arc of Online Video, Driven by Consumers

### Authors

Praveen Datta Leszek Izdebski Neeraj Kumar Kevin Suh

December 2012



Cisco Internet Business Solutions Group (IBSG)

# "It Came to Me in a Stream..." The Upward Arc of Online Video, Driven by Consumers

## Introduction

Only a short time ago, consumers had limited choices for accessing professional video content.

Today, however, a vast smorgasbord of options continues to multiply. Films can be viewed in a theater, of course. But beyond that, they are purchased or rented on DVD or Blu-ray Disc; viewed in hotels and airplanes through video-on-demand (VoD) services; seen on live broad-cast television or premium cable; or saved on personal video recorders (PVRs). On the web, things get even more interesting, with a rapidly evolving set of downloading and streaming options from players like Apple, Netflix, Amazon, and Hulu. On the "dark side," there are even illegal peer-to-peer torrent services.

Hardware options are equally dizzying. Consumers can watch on a traditional television, a connected HDTV, or via cable/satellite/IPTV set-top box with Internet connection. They can also choose to view video content on their laptop or desktop computer, tablet, smartphone, or media player. Indeed, as portable devices meet the cloud, more consumers *expect* to view their favorite content anywhere, anytime.

Given the complexity of this vast array of choices, it is important for all players in the videocontent value chain to understand the wants and needs of consumers. To learn more about these trends and behaviors, the Cisco Internet Business Solutions Group (IBSG) surveyed 1,152 U.S. broadband consumers between the ages of 13 and 75+ in March 2012. The overall goal of the survey was to understand how consumers watch video: their habits, preferences, and the devices they use.

Supported by these findings, this paper explores the current state of the market as consumers express clear preferences for free/ad-supported offerings (such as Hulu) and subscription VoD services (such as Netflix). But it will also examine the increasing willingness of consumers to pay for quality differentiated online video services, and the key elements they will most strongly demand.

### Streaming Goes Mainstream

Considering the many options we have discussed, it is no surprise that consumers are flocking to professionally produced online video.

In the United States, for example, 70 percent of viewers across all broadband consumer segments are watching professionally produced online video every week, with an average viewing time of more than 100 minutes weekly. Among younger segments, the adoption of Internet video is even higher, with 84 percent of 13- to 17-year-olds and 94 percent of 18- to 24-year-olds viewing Internet video weekly. The time spent watching Internet video is also

higher among younger consumers: 30 percent of 18- to 24-year-olds watch four hours or more per week (compared with 13 percent of consumers across all age groups).

In short, online video viewing is commonplace, and streaming has gone mainstream. In the United States, broadband consumers now spend more time watching professionally produced online video than they spend watching DVDs or Blu-ray Discs (see Figure 1). And, their time spent viewing online video is more than three times greater than the time they devote to watching traditional VoD content from their cable, satellite, or IPTV service provider.

A breakdown of online video use reveals that the amount of time consumers spend streaming premium Internet video is nearly four times greater than the time they commit to downloading Internet video from sources such as Apple iTunes. And while consumers still spend the majority of their viewing time with live TV, secondary sources of video (such as live premium cable channels, DVDs, and PVRs) are starting to give way to online video sources.

Furthermore, consumers believe that downloaded and streamed Internet video provides an inferior experience compared with VoD, PVR, live TV, or DVDs/Blu-ray Discs. But the convenience and low cost of streaming may explain why 48 percent of consumers have increased their streaming in the past two years—larger growth than for any of the other categories of video use. Internet video streaming is also likely to rise significantly in the future—in our study, more consumers said they expect to increase their use of streaming than any other kind of online video access.





Base = 1,152 U.S. broadband consumers

% of Time Spent Watching Categories

Q: Of the time that you spend watching professionally produced video,

which percentage is in each of the following categories?

Source: Cisco IBSG, 2012

## Free and Subscription Internet VoD Content Takes the Lead

Providers of online video in the United States are clearly impacting consumer behavior by making streaming much more readily available than downloads. This behavior is based on consumers' preference for streaming over downloading, as well as customers' desire for free/ad-supported content and subscription-based VoD. These all won out over transactional VoD (TVoD) content. The most popular online video services for professionally produced video among U.S. consumers are TV network sites, YouTube, Netflix, and Hulu, with more than 40 percent of Internet video viewers accessing each of these sites. An interesting comparison can be seen between Hulu, which provides free/ad-supported video and has 42 percent usage among online video viewers, and Hulu Plus, a for-fee video service with only 9 percent usage. In short, free video services are still a clear preference.

Free and subscription VoD (SVoD) services also outshine TVoD (such as HBO Go) and peerto-peer torrent sites. More than 38 percent of consumers spend time weekly or daily with SVoD and 43 percent with free video sites, whereas less than 15 percent of consumers spend time weekly or daily with TVoD or peer-to-peer torrent sites (see Figure 2).

Figure 2. Free/Ad-Supported and Subscription Sites Are Used More Frequently than Transactional VoD and Pirated Video.



#### Frequency of Watching Internet Video by Source Types

Source: Cisco IBSG, 2012

SVoD, free-from-aggregator sites, and TV programs accessed through an online subscription service have seen the greatest rise, with, respectively, 53 percent, 45 percent, and 45 percent of Internet video viewers saying they have increased their usage of each of these services in the past two years. Individual purchases of Internet video have experienced the least growth, with just 29 percent of Internet video viewers saying they increased their purchases over the past two years. Moving forward, free-from-aggregator sites and SVoD are expected to see the greatest growth in usage, while individual purchases of Internet video will continue to lag.

Overall, SVoD services are expected to capture more consumer spending than service provider VoD services, kiosk movie rentals, individual rentals, or purchases. More than twice as many consumers (33 percent) report spending \$5 or more per month on SVoD than on VoD from a service provider (16 percent).

Consumers clearly have a preference for free/ad-supported and subscription VoD streaming services. We expect this trend to continue, with consumers increasingly adopting these services as others lag.

### From Free to Paid Content, Perceptions of Value Rule

Although consumers may indeed prefer free and subscription VoD for online video services, our analysis indicates that there are key areas where consumers will be willing to pay extra. These may indicate the potential to differentiate offers in this highly competitive space while revealing additional ways to monetize services.

Consumers were asked to rate a list of factors related to how and where they prefer to watch video. They were then asked to indicate which of these factors would have the biggest impact on their willingness to pay for video content. Some interesting patterns emerged.

One group of factors appears to be table stakes for consumers looking for online video services. These basic factors are important in terms of deciding how and where to watch video, but they are somewhat less likely to influence whether consumers will pay for the service. Consumers have an expectation to watch missed shows through "catch-up TV" and to watch video content at a time of their choosing. These two factors scored much higher in terms of influencing how and where to watch, but they were not as impactful in terms of influencing consumers' willingness to pay. This indicates that any provider of online video services should provide these capabilities just to have a seat at the table. Similarly, absence of technical problems (such as freezing or delays) is one of the decisive factors in deciding where to watch.

Another grouping appears to have enough value to sway consumers toward a willingness to pay. Absence of technical problems scored the highest in this group. Additional factors included convenience of watching at a time of their choosing, lack of advertising, and availability of the absolutely latest content. These factors scored closely in terms of influencing how and where to watch versus willingness to pay for video content. Not surprisingly, providers who can deliver a high-quality picture and sound with no technical glitches—across all devices, with a superior library of content, and with search capability—should be able to differentiate and monetize their offerings.

As the popularity of online video increases, legitimate sources are increasing their audiences. As a result, the perceived value from quality of video and the library, and from the absence of delays and glitches, are proving to be key differentiators. This may explain why, in the United States, only 5 percent of consumers use free peer-to-peer torrent sites at least once per month, while legitimate online movie or video services are used by 31 percent of consumers monthly. There is additional good news for content owners and legitimate distributors: 73 percent of consumers fear that there is a high risk of getting viruses from filesharing sites, and 58 percent feel that video file sharing of copyrighted material is equivalent to theft. Figure 3. Consumers Are Looking for Free Content and Convenience, but Are Willing To Pay for Quality of Experience and Specific Content.



#### Most Important Factors Influencing How and Where To Watch, and Willingness To Pay

Source: Cisco IBSG, 2012

Overall, providing consumers with quality of experience, breadth of content, and choice of device should allow for greater monetization of online video services.

### Many Shows, Any Screen

Despite the multitude of choices, Internet video consumers still relate most strongly to TV shows—this in an expanding universe of movies, short videos, music videos, mini-sodes, sporting events, and other live events. According to our study, 74 percent of Internet video viewers watch online TV shows on a weekly or more frequent basis, and 42 percent watch daily. By comparison, 52 percent watch online movies weekly or more frequently, and just 12 percent view them daily. Thus, the daily relationship between a video service and a consumer is much more likely to be dictated by TV-show viewing. As a result, providing a strong variety of TV shows will be a key competitive offering for any video service.

The majority of consumers watch video on their laptop and desktop computers. Others access online video via cable-connected TV, satellite, or IPTV set-top box; a gaming console; or directly through a connected TV. For consumers who use these non-computer devices to access online video, the greatest frequency of use happens with the TV through a direct or indirect connection, with at least 70 percent of users watching one hour or more of online video a week on the TV. Laptop and tablet users follow this frequency of use closely. In fact, tablet use may soon surpass that of TV, as more consumers have increased their consumption of Internet video on the tablet than on any other video-capable device. More consumers also expect to see increased use of video on laptops, tablets, and smartphones than on any other devices.

Figure 4. 42 Percent of Consumers Watching Internet Video View Online TV Shows Daily, and 52 Percent Watch Online Movies Weekly.



Frequency of Watching Internet Video by Content Types

The perceived benefit of accessing Internet video on devices other than TVs is clearly due to the portability of the device. Getting Internet video on a device other than the TV also seems to make it easier for consumers to access the video libraries that they most want, to avoid subscription costs, and to have more privacy.

Nevertheless, the strong interest in portability has limited effect on consumer behavior. On average, 84 percent of Internet video viewing is done at one's home. Small percentages watch Internet video at a friend's house, at work, in transit, or on the go.

Figure 5.Consumers Will Increase Internet Video Usage on All Devices in the Near Future, with Portable<br/>Devices (Laptop, Tablet, and Smartphones) in the Lead.



#### Expected Change in Watching Internet Video over Next Two Years by Device Types

Q: How will the amount of Internet video you watch on each of the following devices change over the next two years? (professionally produced video)

Source: Cisco IBSG, 2012

Source: Cisco IBSG, 2012

U.S. broadband users; N = 791

## Digital Lockers: Low Adoption, Higher Interest

Digital lockers—online services that enable consumers to store all of the professionally produced digital videos they own, purchase, or rent—have not been adopted in large numbers. But this may change.

While only 10 percent of the general broadband population has adopted a digital locker, 38 percent are interested. Among frequent viewers of online video, however, the adoption rate increases to 21 percent, and adoption interest jumps to 52 percent. The top perceived benefits of using a digital locker are the ability to automatically upload purchased or rented content; to access digital-locker content on any device; to pay once for content and then access it anywhere; and to combine media assets from numerous sources in one simple-to-reach place.

Some of the key concerns are the trustworthiness of storage service providers; security and privacy; speed of upload and download; and lack of locker availability during a temporary service disruption. There is also a fear that consumers would lose their content if the service disappeared altogether.

Despite these concerns, providing a digital-locker service along with an online video service would offer 27 percent of the population an increased incentive to buy online video, while 19 percent would be more likely to rent. As for frequent viewers of Internet video, 32 percent would be more likely to buy, and 24 percent would be more likely to rent, if digital-locker features were included.

Considering the overall consumer preference for free/ad-supported and SVoD services, this greater likelihood to pay for online video content is important. It indicates that more consumers would shift their preference to paid content if offered the right features.

According to our survey, the preferred providers of digital lockers are online companies and online video providers, followed by Internet service providers. Consumers believe that a digital locker bundled with their Internet service would bring savings, convenience, and ease of use. At the same time, they fear that getting a digital locker through an Internet service provider could add costs to current services. They are also concerned with losing their digital locker if they switch services.

Given such consumer worries, effective communication is crucial. Once these fears are assuaged, there is clearly a great opportunity for both video and Internet service providers to increase the monetization of online video services by combining them with digital-locker services and features.





#### **Digital Locker Impact on Video Purchases/Rentals**



- Among frequent Internet video users, 32% would be more likely to buy, and 24% would be more likely to rent.
- Digital locker services may result in greater purchases of video content by consumers as well as an uptick in video rentals.

Q: If you had a digital locker with all of the features you have just evaluated, how would that change the amount of video you buy/rent?

Sample Size = 1,152

Source: Cisco IBSG, 2012

### Conclusion

Consumers have aggressively adopted online video services and show no signs of reversing course. As more providers, more content, and more devices become available, consumers seem ready to take full advantage. It does appear that they will continue to prefer free/ad-supported and subscription VoD services for the time being. However, there is an opportunity to create differentiated online video services for consumers that could drive greater monetization of video content. This may be through emphasizing quality of delivery of the content; the breadth and depth of the library; the quality of the picture and sound; or digital-locker features and functions. Value-added features can also play a role. These could include social interaction and DVD-like features such as director commentary, scene selection, and chaptering for online video.

Clearly, a vast audience is ready for higher-quality online video—and waiting to be tapped. Providing the right incentives will be crucial if streaming is to continue its push into the mainstream.

White Paper

#### More Information

Cisco IBSG (Internet Business Solutions Group) drives market value creation for our customers by delivering industry-shaping thought leadership, CXO-level consulting services, and innovative solution design and incubation. By connecting strategy, process, and technology, Cisco IBSG acts as a trusted adviser to help customers make transformative decisions that turn great ideas into value realized.

For further information about IBSG, visit http://www.cisco.com/ibsg

# ılıılıı cısco

Americas Headquarters Cisco Systems, Inc. San Jose, CA Asia Pacific Headquarters Cisco Systems (USA) Pte. Ltd. Singapore Europe Headquarters Cisco Systems International BV Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)