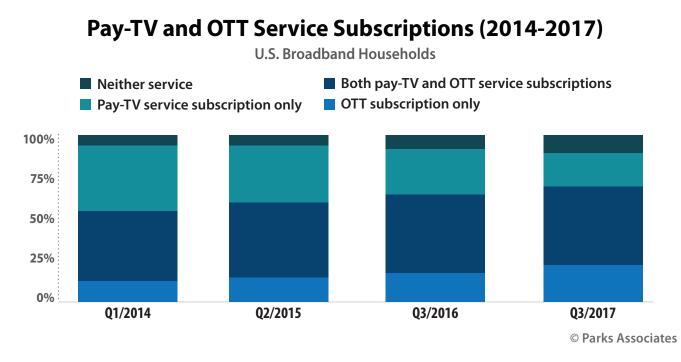
Market Snapshot: OTT and Pay TV: Partnerships and Competition





State of the Market

- OTT video is firmly established in the U.S. entertainment marketplace—more than two-thirds of U.S. broadband households have an OTT service, and 38% of U.S. broadband households have more than one subscription.
- OTT users report watching OTT services on their TV screens at an average of 4.2 hours per week, at least 50% more than other platforms such as PCs, smartphones, or tablets, indicating consumer desire for a premium OTT viewing experience.
- Video consumption drives broadband demand, and faster broadband allows users to explore new ways to experience high-quality video—creating a virtuous cycle for many market participants and driving demand for very high speed broadband, mobile data services, and online pay-TV services.
- The related market risks, where households cancel their pay-TV services and go online only, have developed more slowly. The penetration of OTT-only households has shown a gradual increase since mid-2015.



17% of U.S. broadband households rely on OTT video services exclusively for subscription-based video entertainment.

52% of U.S. broadband households have a subscription to both pay TV and one or more OTT video services.

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OTT Partnerships and Competition

Pay TV and OTT video are becoming more closely integrated as partnerships within the video space become more common.

With many unique video options available to consumers, online video service providers are realizing that success in the market will require partnerships to spread awareness of their products. **The effectiveness of Amazon Channels as a distribution channel was perhaps the biggest change to the video market in 2017.** Partnering with aggregators offers increased visibility while minimizing risk and marketing costs.

Pay-TV services, both traditional and online, have noted this trend and have begun a push to be a "one-stop shop" for all video entertainment by offering OTT services to consumers through their own platforms. They are using these partnerships to their advantage by offering enhanced user experience features such as unified interfaces and universal search to pull content from across different services.

The decline in pay-TV subscribership and ARPUs can be partially offset if operators can effectively utilize their platforms to become a marketplace for video, an aggregation strategy that operators initially used to build their current pay-TV business.

With more than 200 OTT services in the United States alone, competition for subscribers is fiercer than ever. **2018 may be the year that some OTT services begin to fold under the pressure.**

Breakdown of Video-Viewing Audience

One significant impact in the increasing adoption and usage of OTT is the creation of new divisions in the video-viewing audience. New groups are emerging in the U.S. market.

Cord Nevers

5% of U.S. broadband households have never subscribed to a pay-TV service.

Cord Cutters

15% of U.S. broadband households have canceled a pay-TV service and instead watch movies and TV programs on an internetconnected device.

Cord Shavers

8% of U.S. broadband households have recently downgraded their pay-TV service and supplement viewing with video on an internet-connected device.

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Emergence of new consumer segments has forced service providers to offer their own OTT services, either independently or through partnerships.

The variety of OTT services now available has also created significant differences in service adoption and usage among different demographic groups in U.S. households.

- Overall OTT video service adoption is approximately 18% higher among Latino and Hispanic U.S. broadband households when compared to all U.S. broadband households.
- Nearly one-half of Latino or Hispanic U.S. broadband households are "service stackers" and subscribe to two or more paid OTT video services.
- Latino or Hispanic American broadband households have the highest adoption of Netflix (65%) when compared to the national average.

Approximately 33% of Cord Cutters would have stayed with their service provider if offered a Netflix-style service bundled with broadcast TV channels.

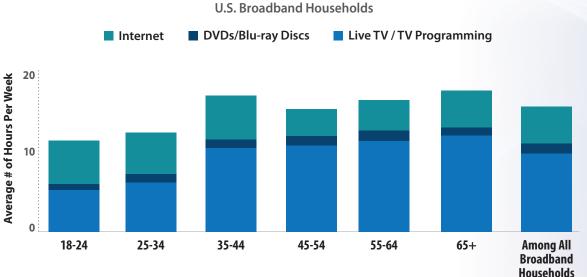
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OTT and Viewing Habits

Eleven percent of U.S. broadband households watch over-the-air broadcast TV channels via an antenna, and pay-TV service subscriptions fell from 87% to 77% between 2012 and 2017.

The rise of OTT correlates to a decline in viewership for live, linear TV channels. In particular, the audience for over-the-air broadcasters has diminished over time, especially among younger heads of household.

Broadcasters, cable networks, pay-TV and content providers, and advertisers all need to adapt their services, especially as the newest generation of viewers takes over a larger role in the viewing audience. Consumer spending will follow the viewing habits to which they are accustomed. Over one-half of TV viewers still occasionally watch live TV broadcasts, but the shift away from linear channel viewing is increasing, particularly among younger consumers.



Average Video Consumption on TV Sets by Sources by Age

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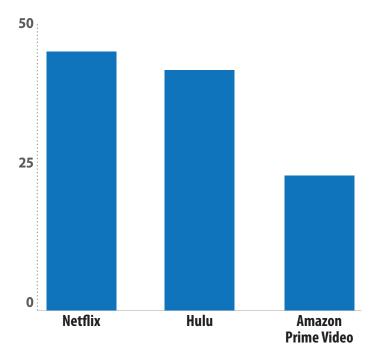
Low Satisfaction with Pay-TV Services

Many of these factors are helping to drive the decline in penetration in the North American pay-TV market, but the increase in available OTT services is just one reason. Consumers are reporting steady increases in monthly fees for their pay TV alongside declines in their satisfaction. These factors impact consumers' willingness to recommend video services to others.

- The average NPS (Net Promoter Score) for pay-TV providers is -20. By comparison Netflix's NPS (the highest rated OTT service) was 44 in 3Q 2017.
- The NPS of online pay-TV services are much higher than those of traditional pay-TV providers. In 3Q 2017, PlayStation Vue had an NPS of 47, and Sling TV had an NPS of 25.

This combination of factors is pushing consumers away from traditional pay TV in favor of easily accessible, lower cost options.

Operator strategies to counter subscriber loss could include promotional options, including free or subsidized CPE (customer premises equipment). Cord Cutters and Cord Shavers indicate these types of offers could entice them to keep their services. Net Promoter Score: Top 3 OTT Services



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"Consumer expectations have changed. While many consumers are familiar with the pay-TV channel guide, the discovery tools and personalization elements of online services provide a better experience in an increasingly on-demand world." - Brett Sappington, Senior Director of Research





Consumers and Privacy Concerns

Consumers are normalizing their OTT behaviors, and one truth emerging from their new habits is that no service can be one-size-fits-all anymore. Services will extend to multiple screens and offer new levels of personalization and user interaction.

Business models emerging from this environment, such as targeted advertising, are potentially lucrative but create new challenges in consumer confidence, as the majority of consumers are concerned about the safety and privacy issues created by these practices.

- **52%** of U.S. pay-TV subscribers are concerned about advertisers using their personal data.
- **46%** of pay-TV subscribers worry about the safety and use of their personal data when they use an online video service.

Consumer concerns will grow since the U.S. government signed a joint resolution into law on April 3, 2017, allowing ISPs to sell collected consumer data without requiring opt-in consent from consumers. The FCC also voted to suspend rules regulating consumer privacy data. Both efforts generated considerable attention in the mainstream media.

For many industry players, access to this granular consumer data is critical to the success of their online marketing, advertising, and business strategies. For example, Google allows advertisers to target YouTube ads based solely on a consumer's search history. This practice will allow brands to push video ads to viewers who recently searched for a retail product, a

Service providers must walk a fine line to collect enough data to be useful to advertisers and consumers while not collecting so much that it is seen as overly intrusive.

> The Facebook-Cambridge Analytica scandal, where users' data was shared and used without their knowledge, will raise consumer suspicions about all activities involving their personal data. Companies can attempt to avoid the fallout by being as transparent and straightforward as possible on how they use the data they collect.

specific movie trailer, or information on a television show. Other companies such as Safegraph use the location tracking data from certain apps on smartphones to collect location data for millions of consumers.



"Privacy fears are a major factor in broadband consumers' online media experiences. If they feel like an internet or video service is taking advantage of them in terms of how their data is being collected and used, then negative perceptions about the service will quickly spread. Providers need to not only preemptively tell consumers what data is being collected and why but also the ways in which that data collection benefits them in terms of features and recommendations." - Hunter Sappington, Researcher





About The Authors



Brett Sappington, Senior Director of Research, Parks Associates

As a director of research at Parks Associates, Brett Sappington leads Parks Associates services research team, including access and entertainment services, digital media, OTT, cloud media, video gaming, and technical support services. Brett is an expert in worldwide television and broadband services. His personal research focuses on the activities and trends among operators and the market forces affecting their businesses. Brett is a regular speaker and moderator at international industry events.

Brett has spent over eighteen years in the industry as an analyst, executive manager, and entrepreneur. Previously, he founded and served as vice president for Teligy, a software company specializing in software for wired and wireless communications systems. Brett established new divisions for networking and audio/multimedia software for Intelligraphics. He has also been involved in the development and marketing of early-market products for 802.11 wireless networking, VoIP, and other technologies.

Brett holds an MBA from the University of Texas at Austin with a concentration in high-tech marketing and a BA in physics from Baylor University.



Hunter Sappington, Researcher, Parks Associates

Hunter Sappington currently studies trends and innovation in connected consumer electronics including devices such as game consoles, smart TVs, virtual and augmented reality headsets, drones, and robotics as well as a variety of smart home devices.

Hunter earned his BA in New Media Journalism with a focus in advertising from Baylor University in Waco, TX.



Parks Associates is an internationally recognized market research and consulting company specializing in emerging consumer technology products and services.

Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small startups through market reports, primary studies, consumer research, custom research, workshops, executive conferences, and annual service subscriptions.

The company's expertise includes the Internet of Things (IoT), digital media and platforms, entertainment and gaming, home networks, internet and television services, digital health, mobile applications and services, support services, consumer apps, advanced advertising, consumer electronics, energy management, and home control systems and security.

For more information, visit parksassociates.com or contact us at 972.490.1113 / info@parksassociates.com.

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OTT VIDEO Market Tracker



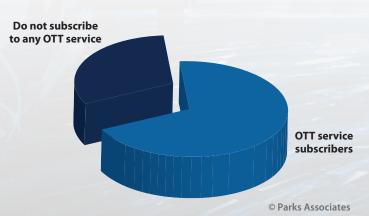
The OTT Video Market Tracker blends company profiles with industry research data and analysis of competing players' strengths and weaknesses in the space.

Tracking Service for OTT Video

- Service features, including content offered
- Unique aspects and key service differentiators
- Penetration and estimated subscribers, reported quarterly
- Pricing and business models
- Updates on existing players
- Profiles and industry implications for new services, including analyst insights

OTT Video Service Adoption

U.S. Broadband Households



Benefits

- Quarterly estimates of subscribers and/or users for each service
- Regular updates on key industry happenings and announcements
- Expert insight into the implications of OTT industry news
- Comprehensive profiles of market competitors and players
 - Service features
 - Platforms supported
 - Content offered
 - Differentiators
 - Pricing and business models
- Details on new trends in the OTT video service marketplace
- Selected quantitative data points related to the OTT video industry
- Breakouts for both U.S. and Canadian markets

"The number of new services and continued growth for many existing services show the vitality of the OTT video services market in the U.S.," **said Brett Sappington, Senior Director of Research, Parks Associates.** "While Netflix holds a substantial lead, new and emerging OTT services are establishing their own place in the market."

