

March 26, 2015

Content is King: Sling TV is not Enough to Spur Cord Cutting

Companies: AAPL, AMZN, CBS, CMCSA, DIS, DISH, DTV, GOOG, LON:SKY, MSFT, NFLX, TWC, TWX, TY0:6758, VZ

Research Question:

Will Sling TV significantly boost the rate of cord cutting in 2015?

Summary of Findings

- DISH Network Corp.'s (DISH) Sling TV will have minimal effect on cord cutting this year because its modest channel lineup will not appeal to the vast majority of viewers who still value the wide variety of sports, live entertainment and other content available via pay-TV, according to all 16 of Blueshift's sources.
- Only four of 115 TV watchers said they are subscribers or plan to subscribe to Sling TV in the next six months, with the majority citing unfamiliarity with it, according to a SurveyMonkey poll. About 10% said they plan to subscribe to <u>Time Warner Inc.</u>'s (TWX) <u>HBO Now</u>.
- The goal of Sling TV is not to turn pay-TV customers into cord cutters, but rather to hook younger viewers and others who have never had a pay-TV subscription, nine sources said.
- Canceling a pay-TV subscription in favor of a patchwork of overthe-top services like <u>Netflix Inc.</u> (NFLX), <u>Hulu</u> and Sling TV is a nuisance for most consumers, does not rival the content available through pay-TV, and may not result in much savings, findings similar to those in Blueshift Research's <u>November</u> <u>2014 OTT report</u>.
- <u>Sony Corp.</u>'s (TYO:6758) <u>PlayStation Vue</u> and the forthcoming streaming TV package from <u>Apple Inc.</u> (AAPL) could lead to more cord cutting over time because of a broader array of content than Sling TV has, and the strength of Apple's brand, eight sources said.
- Five sources expect more Apple iTunes-style services from pay-TV operators in order to sell digital shows and movies that can be stored on a DVR or in the cloud as a way to keep people tethered to their subscriptions. Five other sources think operators will have a tough time making headway in that market since there are plenty of options for such purchases, like <u>Google Inc.</u>'s [GOOG] <u>Google Play</u>, iTunes and <u>Amazon.com</u> Inc. (AMZN).
- Broadband providers said they expect Internet plans to move from speed-based pricing to usage-based models; other sources agreed such changes are on hold while net neutrality rules are debated.
- In <u>Blueshift's March Trend Tracker report</u>, about 1% of respondents reported canceling a cable or other pay-TV subscription in the prior month, a figure that has been consistent for nine months.

Silo Summaries

1) Pay-TV Operators

None are concerned that Sling TV will make a meaningful dent in their subscriber rolls this year. All five believe the service and other OTT offerings like HBO Now are not aimed at their pay-TV customers, but rather at younger consumers and others who have never had a pay-TV subscription. Sling TV does not offer the variety of quality content that viewers can get from pay-TV. Apple's forthcoming streaming TV service is a bigger concern than Sling TV. Two sources think broadband pricing will increase in the next year and three expect Internet service to move towards a pricing model based on data consumption rather than speed.

2) Content Owners

All four sources expect Sling TV to have little immediate effect on cord cutting because it lacks the wide variety of content to lure pay-TV subscribers. Three think Sony's Vue could pose a bigger threat to pay-TV, and three believe Apple's new streaming service might have the content to be popular with consumers. HBO Now will be very successful and will prompt other networks to launch OTT services, according to two sources. Pay-TV operators will respond to Sling TV with their own streaming-only TV packages.

3) OTT Service/Software Providers

Sling TV will not lead to significant cancellations of pay-TV plans. Wholesale cord cutting is unlikely until more live entertainment and sports programming is available online, one source said, and until it becomes cheaper and easier to put together a patchwork of different OTT services, two said. Broadband providers want to charge for Internet service based on usage rather than speed but are unlikely to make such a switch while the net neutrality dispute is ongoing.

4) Industry Specialists

None expect Sling TV to boost the rate of cord cutting in 2015. Sling TV is aimed at getting consumers with no pay-TV subscription to start buying a TV package. It's difficult and expensive to put together a lineup of OTT services that matches pay-TV for content, two sources said, though one thinks Apple's forthcoming streaming TV service could be strong enough to change the dynamics. Pay-TV operators will try to keep subscribers through improved set-top boxes with voice controls and more DVR storage. It will be difficultfor pay-TV providers to succeed with one-click purchasing of shows and movies. Broadband providers are not likely to move to a usage-based Internet pricing model this year.



| | Sling TV to Boost Cord Cutting | OTT Can Match Pay-TV Content | ISPs to Charge Based on Usage |
|-----------------------------------|-----------------------------------|---------------------------------|----------------------------------|
| Pay -TV Operators | Ļ | Ļ | 1 |
| Content Owners | ↓ ↓ | Ļ | ↓ |
| OTT Service/Software Providers | Ļ | ¥ | ¥ |
| Industry Specialists | Ļ | Ļ | \rightarrow |

Background

The top U.S. cable operators lost more than 1 million subscribers in 2014. While the vast majority of those subscribers switched to competing pay-TV plans offered by satellite or telecom providers, the overall number of pay-TV subscribers still fell by 125,000 last year. The cord cutting phenomenon is being led by millennials who increasingly turn to online formats like Netflix, Amazon Prime, YouTube and Hulu for content. Viewers between the ages of 18 and 34 decreased their use of traditional TV by 10.6% between September and January, according to Nielsen.

In an effort to keep up with the times, pay-TV operators are dipping their toes into online waters. DISH Network announced in January that it would offer a streaming-only TV package called Sling TV that would allow consumers to access a small package of channels online for just \$20 per month. Live sports has been a key factor in keeping consumers tethered to pay-TV subscriptions, but with Sling TV, viewers can watch ESPN and ESPN 2 without a traditional pay-TV subscription for the first time.

Additional players are joining DISH. Sony has launched Vue, which offers a channel lineup including major broadcast networks for viewing over its PlayStation gaming console; Verizon Inc. (VZ) is planning to introduce a streaming-only TV package this year; and reports have emerged that Apple plans to announce a subscription-based streaming TV service.

About 7% of U.S. households already have cut the cord, according to GfK Research, with that figure forecast to rise to 10% by 2020. The rollout of Sling TV and the offerings from Sony, Apple and others has the potential to push those cord-cutting figures higher.

Netflix has been the top beneficiary of cord cutting and now has 13.6 million more subscribers than the leading pay-TV service, Comcast Corp. (CMCSA). The over-the-top (OTT) content market is expected to grow from \$5.8 billion in 2014 to over \$10 billion in 2018 according to Infonetics Research.

Saving money is a key factor for those that have chosen to cut the cord. Consumers can susbcribe to CBS Corp.'s (CBS) All Access, Hulu Plus, Amazon Prime Instant Video, Netflix and Sling TV for about \$51 a month, \$13 cheaper than the average traditional cable service.

In Blueshift's Nov. 20, 2014 OTT/Cord Cutting report, released before the announcement of Sling TV, all sources said the rate of pay-TV cord cutting would not increase significantly in 2015. Sports and other live programming were not widely available on OTT services and would keep subscribers hooked to pay-TV. Pay-TV operators also offering broadband Internet services were content with subscribers cutting back on cable and adding higher-margin high-speed Internet packages.



Current Research

In this next study, Blueshift Research assessed whether the introduction of Sling TV would lead to an uptick in cord cutting. We employed our pattern mining approach to establish six independent silos with 16 primary sources (including nine repeat sources), an online survey, and eight relevant secondary sources focused on Sling TV, Apple and TV viewing habits:

- 1) Pay-TV operators (5)
- 2) Content owners (3)
- 3) OTT service/software providers (4)
- 4) Industry specialists (4)
- 5) SurveyMonkey survey of 115 TV watchers
- 6) Secondary sources (8)

Next Steps

For its next study, Blueshift Research will take a closer look at the possible impact of Apple's forthcoming streaming TV service as details emerge. We will look at the quantity and quality of on-demand and "catch-up" programming offered by some of the newer OTT services. Finally, we will examine whether slimmed down streaming TV packages might bring younger consumers into the pay-TV fold to eventually move up to a full subscription, or whether the proliferation of such services reinforces the idea for the younger generation that they will never need traditional pay-TV.

Silos

1) Pay-TV Operators

Of the five sources representing cable, satellite and telecom companies, none are concerned that Sling TV will make a meaningful dent in their subscriber rolls this year. All five believe the service and other OTT offerings like HBO Now are not aimed at their pay-TV customers, but rather at younger consumers and others who have never had a pay-TV subscription. Sling TV does not offer the variety of quality content that viewers can get from pay-TV, according to four sources. One said Apple's forthcoming streaming TV service is a bigger concern than Sling TV due to the strength of the Apple brand. To combat the rise of OTT options, over the next few years more pay-TV providers likely will introduce their own streaming TV packages that allow subscribers to customize their channel lineups, three sources said. They also will offer opportunities for one-click purchasing of shows and movies that can be stored on a DVR or in the cloud as a way to keep subscribers from canceling, according to four sources. Two sources think broadband pricing will increase in the next year and three expect Internet service to move towards a pricing model based on data consumption rather than speed.

Key Silo Findings

Cord Cutting

- 5 of 5 said Sling TV will not lead to a surge in cord cutting in 2015.
- 5 said Sling TV, HBO Now, and other OTT services target consumers who have never had a pay-TV subscription. _
- 4 believe OTT services can't match the breadth of content available on pay-TV.
- 2 think younger consumers will eventually become pay-TV customers.
- 1 said Apple's streaming TV package could be popular because of its strong brand name.

Pay-TV Strategy

- 3 expect pay-TV operators to allow consumers to customize their own packages of streaming channels, but not for several years.
- 4 think offering one-click purchasing of shows and movies that pay-TV subscribers can store on their DVR or in the cloud will help pay-TV operators keep consumers tethered to their service.
- 3 said pay-TV operators should add Netflix apps to their set-top boxes.







1 thinks the increasing use of streaming TV will help pay-TV operators increase advertising revenue by having better targeting capabilities.

Internet Usage

- 3 expect broadband providers to move to a usage-based pricing model for Internet service rather than the current speed-based system.
- 2 think broadband pricing will increase in the next year.

1) Executive at a major pay-TV operator; repeat source

Sling TV and other new OTT offerings won't trigger a stampede of cord cutters. Rather, these services are aimed at people who are not pay-TV subscribers. As TV moves further into IP-enabled platforms, pay-TV operators are focusing on new ways to boost ad revenues with dynamic, targeted advertising. One-click purchasing of shows and movies is proving popular with consumers, as evidenced by Comcast's numbers for this high-margin model. Limits will have to be placed on high bandwidth users as streaming services proliferate, especially with 4K on the horizon, though no single model has emerged as the obvious leader among the many being tested.

Cord Cutting

- "I don't think there will be a whole lot more cord cutting this year."
- "There will be continued progression of cord shaving, and people trying to subscribe to something that lets them get to what they really want to pay for, and not all the things they don't want to pay for. But that will be a long, slow evolution in my opinion."
- . "In the cord cutting space, there are people all the time who can't afford or choose not to [be pay-TV subscribers], but I don't think it's a big stampede."
- "What you're seeing this year is lots of opportunity to try to get people into half a product-selling half a pie is better than none at all."
- "HBO [going a la carte], or any of these other services, it's a way to get the people who weren't going to pay for it anyway. It's not a way to get people to stop paying the big bucks. It's a way to get people who were paying nothing to pay something.
- "It's still speculation [as to whether 'cord never' millennials will eventually come into the pay-TV fold]. Some people are stretching it, waiting more, trying to see if they can get away with not subscribing. The trouble is, when you have a little kid you can't go out to the bar to watch that one game a week. When you're single, or even young married, it's a different story."
- "[Cord nevers will eventually subscribe], but I think the question is, what package do they subscribe to when they finally reach that barrier? Is it a traditional package or a smaller package? But they're going to subscribe to something.'
- "I haven't seen any evidence of [increased] cord cutting among older viewers. Aside from pure economic issues-where someone is on a fixed income and can't pay the bill-I think people are set in their ways. They like

What you're seeing this year is lots of opportunity to try to get people into half a productselling half a pie is better than none at all. ... HBO [going a la carte], or any of these other services, it's a way to get the people who weren't going to pay for it anyway. It's not a way to get people to stop paying the big bucks. It's a way to get people who were paying nothing to pay something.

Executive, Major Pay-TV Operator

- their channels, they like their selection and frankly, they like the user interface they have. And as you get older, you're less likely to want to get a completely new user interface-let alone have to figure HBO, ESPN and Netflix online separately."
- "HBO [going a la carte] is an interesting test. I think we're going to learn a lot from it, so I'm excited to see what happens. I don't know how many people are going to want HBO that don't want cable. At least in my world, I've always seen HBO as a great add-on to basic cable. I've never considered that people would just want HBO and would get rid of the rest of cable. So I don't know how many people are really going to do that."

Pay-TV Strategy

"There's a general trend, as we move into this more IP-enabled television world, whether that's over-the-top or it's walled garden stuff, it enables [operators] to do more dynamic and targeted advertising. And that has the ability-if you do things right-to cover more of the costs of providing the service than it has traditionally."



ΟΤΤ

- "There's only so much you could do when you had to put one ad into a program, and send that one ad to everybody watching that program around the country. In traditional TV advertising, somewhere between 50% and 80% of people seeing the ad are completely irrelevant; but in order to get to the 20% you want to reach, you have to buy all of them."
- "When I get to the point where I can deliver an ad only to people that are highly likely to be in the market for a truck, then I have the ability to monetize that opportunity at a far higher rate, and as a result cover more of the cost of a service."
- "Online in general is ahead of this-not just Facebook, but Travelocity and everything else. We can start to do the same thing [in pay-TV], starting with geographical targeting, which means that ad is now really, really valuable to somebody selling trucks."
- "The first thing you do is to ... pinpoint geographic [location of consumers]. You can be really fine on the geographic pinpointing, which was never possible before. Even in cable, which could do regions of a city, they still had to go and take the whole northwest corner of a city [to advertise a product]. Now you can actually do separate neighborhoods, by street boundaries. Then you start to work in demographic data and target on that."
- "We expect [advertising revenues to rise] as the number of eyeballs using advanced [IP] services reaches critical mass, so in the millions,"
- "More and more programmers are allowing TV Everywhere, from your big provider-whether that's Comcast or DirecTV [DTV] or DISH or whatever-both for on-demand and for live content. This recognizes that when we have someone as a subscriber, we want to give them every opportunity to stay a subscriber."
- "Most of the providers seem to be opening TV Everywhere up, if you look at Comcast or Time Warner [Cable Inc./TWC] or [the satellite providers]. There's lots and lots of stuff now, more and more all the time. We'll continue down that road."
- "You do see in the industry—and not just with sports—more fights going on where it gets to dropping the channel off a service, and the service goes dark for a while until they reach a contract. This means the negotiations [with content owners] are getting harder than they used to be."
- "It was a really big deal that [Sling TV] included sports and wasn't just movies and old TV shows. I think there is momentum in that direction [for more sports to go OTT].'
- "It's getting easier to find and access content [online]. There's still the pay barrier, but if you look at what Comcast has been reporting publicly, they're making an awful lot of money not just renting pay-per-view any more but in doing the electronic sell-through [EST]."
- "Comcast is seeing a lot of people make that [EST] purchase, which from my consumer perspective doesn't make a lot of sense, since how many movies do you want to watch more than a couple of times? Also, the numbers are showing that these [EST] purchases are not primarily kids' content. It seems like they're selling a lot of other movies. I don't know whether it's just by mistake-people want to watch the movie and the first thing they come to is the EST, so they purchase it for \$9.99 when they could have rented it for \$3.99."
- "But the trend seems to be that [the EST model] is working, and I think it has more to do with the [user interface] and access than it really does with the concept of EST."

Internet Usage

- "[ISPs] are going to have to put some kind of level [on bandwidth usage]. Everybody's got a theory on it: there are [operators] doing caps, those doing tiers, those doing 'unlimited until you abuse it,' and then a warning. There's all these different theories, and I'm not sure which one wins out, but there's going to have to be some limit."
- "You can't sell a basic Internet service and have people streaming 24 hours a day of HD or soon-to-be 4K video, and make that economical. Just the transfer fees between the Internet providers, the settlement fees, are going to hurt most of those providers unless you're a Tier One, where you don't really pay for the settlement fees."

2) Business sales representative with a regional pay-TV provider; repeat source

Sling TV will not put a significant dent in pay-TV subscriptions in 2015 but, along with similar OTT services, it could accelerate cord cutting in three to four years, especially those that offer live sports. Cable and satellite companies will come out with their own OTT products as DISH has done with Sling TV, and they may also try to close deals on exclusive content to add to their value proposition. Broadband providers likely will start charging consumers based on data usage in the wake of the FCC's ruling against Internet fast lanes. Cable operators continue to enjoy success in attracting and



retaining customers by bundling broadband, TV and telephone services at low introductory prices, although it's harder to sell these services to younger consumers.

Cord Cutting

- "Sling TV is one of several OTT offerings that I think, collectively, will contribute to some cord cutting, but not significantly this year. It's going to take a while. Maybe 3 or 4 years. All of the Sling TV content is from basic cable. The real attraction is they're offering a couple of ESPN channels. OTT sports is what's going to hurt cable."
- "One thing that could hurt OTT offerings is if pay-TV operators try to lock up exclusive deals on hot content. I could see that becoming a battle. The other thing that could put the brakes on OTT is bandwidth usage. Streaming anything approaching high definition consumes a tremendous amount of data, and broadband providers may very well start charging customers based on their consumption."
- "I believe customers want a recording function like TiVo. A lot of OTT services give you a window of about three days to watch a show once it's aired, but that may not be enough."
- "Young people get pay-TV mainly for two reasons: either they are big into sports or they like the convenience of Triple Play [phone/Internet/TV]. Even bundled services can be a hard sell as millennials don't often see any benefit to having a home phone when they've got a smartphone."
- "People don't cancel their cable just because a premium channel like HBO offers a la carte. HBO Go draws people who've never had HBO before and they want to watch a hot show like Game of Thrones. The premium channels are just going after customers who've never had top-tier cable."

Sling TV is one of several OTT offerings that Т think, collectively, will contribute to some cord cutting, but not significantly this year. It's going to take a while. Maybe 3 or 4 years.

> **Business Sales Representative** Regional Pay-TV Provider

Pav-TV Strategy

- "Pay-TV companies are still heavily dependent on licensing sports. That is largely responsible for the industry's strength."
- "Most operators have some form of Triple Play that customers want because they can pay one bill for the services they need. I think increasingly we'll see operators focusing on broadband and VoIP (voice-over Internet protocol)."
- "Over the next couple of years we'll see more a la carte offerings from pay-TV operators to match OTT."
- "Pay-TV customers will continue to subscribe because of sports. It's the breadth of the content, not just ESPN. There is programming devoted to hunting, fishing, even certain types of fishing. These niche channels also hold subscribers."
- "OTT sports programming depends heavily on the licensing, which is expensive. DISH owns Sling TV so they can afford the licensing, but the revenues all flow back to the same company. Pay-TV operators are in a better position to offer these OTT services than a start-up trying to go at it alone."
- "Look at what happened to Aereo. They tried to get around broadcasters' retransmission fees and the Supreme Court shut them down. It basically came down to copyright infringement. I don't think anyone believes Aereo was ever in a financial position to pay retransmission fees or license exclusive programming."
- "The appeal of cloud or DVR storage is that it represents an investment in a collection of TV shows and movies. So I think subscribers would be less likely to cancel services. It's the same thing as cloud data storage. If you are paying Google or Microsoft [Corp./MSFT] or AT&T [Corp./T] a monthly fee to store valuable data that you can access whenever you want. I think the natural tendency is to keep subscribing. How many people will go to the trouble of migrating that data over to another cloud service?"
- "Putting the Netflix app on a set-top box means your customers aren't going to another device to watch Netflix. It's another way of keeping them in the fold. If operators are smart, they would want to add Netflix to their box features. It's more an issue of cost, of building and distributing new boxes."

Internet Usage

"Metered Internet service is very likely now that the FCC has ruled against ISPs charging companies for broadband speed. ISPs will just look at ways to increase revenues from consumers."

Metered Internet service is very likely now that the FCC has ruled against ISPs charging companies broadband for speed. ISPs will just look at ways to increase revenues from consumers.

> **Business Sales Representative** Regional Pay-TV Provider





- "I'd say people are buying the fastest speed they can afford. We often get calls from people who want to upgrade their home Internet because it's not as fast as their connection at work. The price points for different speeds typically double from basic service to the next step up, then rise incrementally. So basic service might be \$20 a month, then the next level is \$40."
- "Most pay-TV operators try to sell bundled services with introductory pricing that might last anywhere from 90 days to a year. So during that introductory period, it may actually be less expensive to bundle high-speed internet with TV."
- "It's too early to declare a winner on net neutrality. It's a given that the broadband providers will challenge it in court, so it's going to be in legal limbo for a while."
- "If I had to predict right now, I'd say the consumer price of broadband will go up, based on data usage."

3) Marketing director with a regional pay-TV provider

OTT packages such as Sling TV, Apple TV and Sony's Vue are not enough to lure customers from their pay-TV subscriptions because they do not have the breadth of content. The cost of buying multiple OTT services to get all desired channels can guickly add up to the equivalent of a pay-TV bill, with the added hassle of paying several service providers. Pay-TV operators must evolve their business models to give consumers more choice and flexibility. Bandwidth pricing will increase as streaming demand continues to grow, with some form of billing based on data usage. Millennials and people who have never had pay-TV are accustomed to free content on mobile devices, so entry-level packages such as Sling TV are a way of drawing them in to subscriptions.

Cord Cutting

- "It's not just Sling TV. Sony's coming out with a streaming service for the PlayStation later this year, and Apple is doing its own streaming TV. I don't think the target customer is necessarily a cord cutter, though. These are more like entry-level entertainment packages that offer maybe 10 percent of the channels a cable subscriber can get. That 10 percent may not include all the channels you want to watch, so then there's the question of, do you buy OTT can't really become a force multiple OTT services, and how much of a hassle is that? When you add up the cost, does it come out about the same as a cable bill?"
- "Part of the strategy with Sling TV is to bring on customers who've never had a DISH subscription. If they like their 20 channels, that's great, because it's drawing new customers, but maybe it whets their appetite for more and then they move up to a better subscription."
- "OTT can't really become a force until there is a quantity and diversity of content people want to buy and it can be enjoyed on any device with reliable broadband."

until there is a quantity and diversity of content people want to buy and it can be enjoyed on any device with reliable broadband.

> Marketing Director Regional Pay-TV Provider

- "Some millennials, as their income grows, they see pay-TV as an affordable entertainment option. The thing about this group is they grew up in an online world where most of the content is free. They're accustomed to experiencing that content on devices that didn't exist a generation ago-smartphones, iPads. They're not a stay-at-home, watch-TV group."
- "People aren't going to cancel their pay-TV service just to get HBO a la carte. It's another gateway service to attract customers who've never had pay-TV before and this is a price point they can afford."

Pay-TV Strategy

- "Clearly, the pay-TV model has to evolve. Offering 200 channels for one price worked well because it was easy and there were few options in the marketplace. So I do think we will see some streaming packages and eventually the consumer will be able to choose her own package. That level of individual customization is still a few years away due to the costs and associated technical issues that have to be worked out."
- "Cable companies are promoting new features built around convenience. Comcast's Xfinity X1 has a voice-activated remote control and networking capabilities, so if you start watching a show in the living room and decide to finish watching in bed, the program picks up wherever you left off."
- "I wouldn't say having ESPN on Sling TV is going to open the floodgates for streaming sports. The licensing costs for ESPN programming are probably out of reach for an OTT service, unless it's like Sling TV, which is owned by DISH."
- "Social media is complementary to live TV, not a replacement for it. Social media is the equivalent of the office watercooler conversation."



ΟΠ

- "Pay-TV operators are already having success with the [one-click] purchase model. If you can get all of your recorded entertainment under one roof, you're more likely to stick with that company, especially if it's cloud-based. Another thing is selling a movie or other content produces more revenue than a rental on the title."
- "The idea of having the Netflix app on a set-top box makes sense. You don't want your subscribers moving to another platform. It's a good move. There is some bad blood between Netflix and some broadband providers over the net neutrality debate, so that might make the conversations a little awkward."

Internet Usage

"Bandwidth, like anything else, is priced relative to the demand. As these streaming services come online and grow, the pressure on capacity is going to intensify. Just about every device, whether it's a TV or a tablet or a phone, has an HD display. To take advantage of that resolution, people will want HD streaming. That means a speed of at least 5 mbps. In terms of usage, a

90-minute movie will probably consume at least 8 gigs of data. So the short answer is, yes, prices are going to go up."

- "I don't know that there's a correlation between these so-called cord-cutters and Internet speeds. More likely, we're talking about two different types of consumers. Where money is a factor, particularly with younger people, the scales tilt toward the fastest Internet speed they can pay for because they are after streaming content. With cord cutters, it's a bit more complicated and may also be financial in nature. Pay-TV is often the first thing to go when a household faces a budget problem. Right now, I just don't see people cancelling their pay-TV subscription because they've suddenly decided to go OTT. The content just isn't there yet for streaming.'
- "Broadband providers are going to win [the net neutrality battle], either by defeating the FCC in court or devising more expensive pricing plans for consumers based on their data consumption."

4) Marketing strategist with a regional pay-TV provider

OTT services like Sling TV are not a cost-effective alternative to pay-TV, as such packages are twice as expensive on a channel-for-channel basis. Consumers would have to subscribe to multiple OTT plans to get the variety of content available through pay-TV. However, cable operators will begin offering custom packages within a few years if Sling TV and other OTT plans prove popular. Broadband charges are expected to increase within a year, which may prompt the FCC to step in for another round of regulations. ISPs still are trying to determine the best way to charge for data usage. Ultimately, choosing an Internet plan could become as complex as navigating offers from mobile phone carriers.

Cord Cutting

- "Sling TV isn't a cost-effective replacement for cable due to the limited number of channels. To really get a good comparison, you'd have to combine Sling TV with 3 or 4 other OTT offers to come up with a similar quantity of good content. Then the cost is about the same as a cable subscription."
- "[Sling TV] might appeal to a smaller segment of TV viewers who want sort of a basic range of programming. It's still fairly expensive relative to the amount of content you get."
- "For OTT to pick up speed there first has to be content, a good mix of quality content. A lot of what we're seeing right now is the repackaging of some basic cable channels chosen for broad appeal, but the average price per channel is nearly twice what you'd pay for a cable subscription."
- "HBO's offer is interesting because it shows they're willing to step outside their dependence on cable operators. Aside from that, I don't see a la carte

Sling TV isn't a cost-effective replacement for cable due to the limited number of channels. To really get a good comparison, you'd have to combine Sling TV with 3 or 4 other OTT offers to come up with a similar quantity of good content. Then the cost is about the same as а cable subscription.

> Marketing Strategist Regional Pay-TV Provider



Clearly, the pay-TV model has to evolve. ... So I do think we will see some streaming packages and eventually the consumer will be able to choose her own package. That individual level of customization is still a few years away.

> Marketing Director Regional Pay-TV Provider

HBO leading to cord cutting. It's going to appeal to people who don't have cable, don't want cable and only want to watch a specific HBO show."

"Millennials get a lot of free content-movies and music on YouTube-and go for low-cost, content-rich offers like Netflix. Or they'll buy Amazon's free shipping service just to get Prime and watch movies there. Will they [eventually] subscribe to pay-TV? I think it's a factor of age. At a certain point, people don't go out as much as they did when they were younger. The entertainment options are more home-based. Also, pay-TV still controls a lot of exclusive content like live sports events that attract people regardless of age. Sling TV has thrown that a bit off balance by including ESPN in their offer."

Pay-TV Strategy

- "Cable operators are going to have to look at building custom packages in the next few years if the demand is still there. There's also an opportunity to improve customer satisfaction with cable overall. We can deliver a richer experience with high-capacity DVRs or cloud storage of recorded content. Streaming would probably be a part of those new offers."
- "Live sports is a big part of the reason people sign up for pay-TV and keep their service."
- "Promoting one-click rentals makes more sense than selling digital content outright. Unless it's a movie like Frozen that kids want to watch over and over, it seems people are content to watch a movie once or twice. But you can also argue that selling digital titles helps retain customers because they become dependent on that DVR or their cloud account."
- "More set-top boxes will roll out with the Netflix app. It's convenient for the customer and adds value to our service."

Internet Usage

- "If not this year, data charges will go up next year. I think it all depends on how net neutrality shakes out. The FCC's ruling overall is favorable to consumers, but the big broadband providers will fight it in court. The argument will be that it's expensive to build out these networks, run more fiber lines to keep pace with demand. Without passing on these costs, they'll argue there is no reason to invest."
- "I don't think anyone has figured out the best way to charge for data usage. Most likely, there will be a range of different pricing plans among ISPs and then it gets as complicated as choosing a cell carrier. Then we could see the FCC step in and look at these pricing plans and maybe regulate some more."
- "Speed upgrades are almost always based on the customer's desire for a smoother streaming experience. If you compare ISPs, their pricing structures are very similar. There's a big jump between basic service and the intermediate speed, but a smaller increase from intermediate to the fastest."

5) Marketing executive with a regional pay-TV provider

Sling TV and similar OTT offers may cause modest market disruption, but the services are not sufficiently different from each other to threaten pay-TV. Apple could gain consumer favor based on the popularity of the brand, but OTT as an entertainment lifestyle is at least five years off. millennials are accustomed to free content and may perceive pay-TV as an expense they can live without. Small OTT packages like Sling TV are targeting this demographic in an effort to sell them something rather than nothing. Pay-TV operators continue to promote the value of their bundled packages by arguing that a \$20 OTT package of 20 channels is not good value compared to \$100 for 190 channels, broadband and telephone service. Broadband pricing depends on competition in any particular market as well as the eventual resolution of net neutrality, which will face a court challenge from major ISPs.

Cord Cutting

- "Sling TV at most could cause some cord switching, but not really cutting. DISH owns them, so a DISH customer going over to Sling TV is still a DISH customer using streaming instead of a satellite signal."
- "It will take a lot of OTT services with different programming to threaten pay-TV. Right now, with the channel selection and pricing, the OTT services out there or coming soon aren't terribly different from each other."
- "Apple TV might catch on. Almost anything with the word Apple in front of it is going to draw a large group of consumers."
- "Content is the most important part of an entertainment package. With OTT, you also need a fast Internet connection or it's going to be frustrating to

The only way I can see OTT becoming a lifestyle is when all the content people want is available for streaming. That's at least five years away.

> Marketing Executive Regional Pay-TV Provider





watch. There are only a few OTT brands that have shown they can do it well. There's Netflix, Amazon Prime and Hulu. Some would add YouTube to that list. Google is certainly working hard to monetize it."

- "The only way I can see OTT becoming a lifestyle is when all the content people want is available for streaming. That's at least five years away."
- "Millennials are so used to free content that the idea of paying for programming is practically a foreign concept. Some probably see pay-TV as an expense they can live without or work around. I think Sling TV and Sony's PlayStation streaming are targeting the millennials. It's a way to sell them something at a price they can accept."
- "HBO Now is another effort to go after consumers who don't have any pay-TV service. I don't see people cancelling their cable subscription so they can just get HBO."

Pay-TV Strategy

- "If you break it down, bundled services from pay-TV providers are really the best value. Twenty dollars for 20 streaming channels is pretty high when for about \$100 you can get high-speed Internet, about 190 [TV] channels and phone service. We're promoting that value."
- "Sports programming is a big reason people sign up for cable in the first place."
- "There are two ESPN channels on Sling TV, but there's something like 40 different sports channels available nationwide through pay-TV. Many are specialty channels-golf, fishing, tennis, different college conferences. All of these have separate carriage agreements, so there is the potential for them to sign with OTT providers, but I don't think that will happen soon. The OTT packages out there are pretty general interest."
- "When you add a feature like buying shows and storing them in the cloud, it does help retain customers."

Internet Usage

- "Charging on bandwidth usage depends a lot on the number of competitors in the market. In many parts of the country, consumers have at most two choices in an ISP provider and often only one."
- "There will be a lot of expenses associated with upgrading networks to 4K streaming and in some areas maybe just getting it up to HD standards. Someone will have to pay for that. If the FCC's ruling stands that ISPs can't charge companies for fast lanes, then they will probably try to charge customers for data usage to cover the difference."
- "For the moment, streaming companies like Netflix and Hulu are winners. Net neutrality hasn't really been settled though. Verizon and Comcast and AT&T will fight it for awhile in the courts."

2) Content Owners

All four sources expect Sling TV to have little immediate effect on cord cutting because it lacks the wide variety of content to lure pay-TV subscribers. Three think Sony's Vue could pose a bigger threat to pay-TV, and three believe Apple's new streaming service might have the content to be popular with consumers. HBO Now will be very successful and will prompt other networks to launch OTT services, according to two sources. Pay-TV operators will respond to Sling TV with their own streamingonly TV packages, three sources said. Operators will have a difficult time with an iTunes-style one-click purchasing system for shows and movies because Apple, Amazon and Google have that market well covered, according to two sources, but a third said Comcast and others already are having success with such a model. Three sources agree there will be no major changes to Internet pricing until major industry mergers and the debate over net neutrality rules are resolved.

Key Silo Findings

Cord Cutting

- 4 of 4 do not expect Sling TV to result in significantly more cord cutting in 2015.
- 4 said OTT services need a wider variety of content, especially sports, to be a viable alternative to pay-TV.
- 3 think Sony's Vue could be a bigger challenger to pay-TV than Sling TV.
- 3 believe Apple's streaming TV service will have the content and name recognition to be very successful.



There will be a lot of expenses associated with upgrading networks to 4K streaming and in some areas maybe just getting it up to HD standards. Someone will have to pay for that. If the FCC's ruling stands charge that **ISPs** can't companies for fast lanes, then they will probably try to charge customers for data usage to cover the difference.

> Marketing Executive Regional Pay-TV Provider





- 2 said HBO Now will be a big hit that leads to other networks launching online-only services.
- 1 believes Netflix and some other OTT services have a big problem with password sharing, something that Amazon is
- largely immune from because of the other benefits associated with a Prime membership.

Pay-TV Strategy

- 3 said more pay-TV operators will begin to offer streaming-only TV packages of a similar scope to Sling TV.
- 2 think pay-TV operators will have limited success selling digital shows and movies as Amazon, Apple and Google Play have that market covered. 1 said some operators like Comcast already are having success with the one-click purchase model.
- 1 thinks having a Netflix app on a set-top box makes sense for pay-TV operators but is of little significance to consumers.

Internet Usage

3 predict no immediate price hikes for Internet service or a move toward usage-based pricing until net neutrality rules are resolved and key industry mergers are no longer under regulatory scrutiny.

1) Sports network executive

Sony's Vue offering is impressive and may challenge traditional pay-TV more than Sling TV will. The fact that Sony has an iPad app for Vue suggests it will be sufficiently different from Apple's upcoming streaming service. There is still value in the pay-TV bundle, especially for live sports. More channels will launch online, but successful models will need to do more than just replicate existing content for streaming devices. Amazon has a distinct advantage over standalone rivals like Netflix because it is much less vulnerable to password stealing. It's too early to tell whether ISPs will charge more for bandwidth any time soon, but it's unlikely they will do anything to attract attention from regulators in the near future.

Cord Cutting

- "I've been looking at the Sony offering, which they've been working on for an awful long time, and it shows, because you really have a lot of programmers in there. The Vue [offering] looks more like a replacement for cable. There are three tiers: a \$50, \$60 and \$70 package. I think it's going to get some traction. It will be interesting to see what happens, because if it's just about the price proposition, I'm not sure it really gets you anywhere."
- "On paper, Sony Vue might not seem that compelling [next to traditional cable]. But if it's about the experience-because consumer experience has changed-then [Sony Vue] really starts to be something. There's a certain aspect to these [OTT] services which takes a lot of the hassle of [traditional] cable out."
- "I don't think [Sony Vue] is just about millennials. I think it might appeal to older people, who don't mind paying \$70, and can get the service in multiple rooms and multiple devices. There's also a lot of sports, assuming they are not blacked out on the broadcast networks."

What's also interesting [about Vue] is that they're going to have an iPad application, which is surprising to me. I just applaud them for getting Apple to play ball. And it also tells me that Apple's offering is going to be something different [from Vue].

Sports Network Executive

- "I was expecting to see Vue or Sling TV add a lot of MCNs-multi-channel networks-I think once you do have something like that which blends all these services, then you've really got a differentiated product."
- "What's also interesting [about Vue] is that they're going to have an iPad application, which is surprising to me. I just applaud them for getting Apple to play ball. And it also tells me that Apple's offering is going to be something different [from Vue]."
- "I think [DISH CEO] Charlie Ergen is less worried about cord cutters, and sees Sling as a product to go out over his wireless spectrum."
- "What [the announcements of the last couple of weeks show] is that this [OTT model] is really building up steam. And when you have a few competitors, there's also potential for consolidation or shake-out."
- "The thing about Amazon Prime [which differentiates it from other stand-alone OTT offerings] is that Amazon actually gets paid by a huge portion of their subscribers, unlike Netflix and some of the other SVOD services, which have a huge password sharing problem. You don't get that with Amazon Prime, because your subscription has an alternative use. You're not going to readily share your Amazon Prime account beyond your spouse."

Pay-TV Strategy





- "There's still value in the bundle for all the entertainment channels, but it seems like a little less so because there's so much that can start to move into an SVOD model [subscription video on demand]. Whereas our total value [as a sports network] is in live entertainment."
- "You're starting to see the cable universe shrink. Many [networks] will launch online, but long term, I don't think it's as simple as having the same product in another format. And yet that seems to be what many are doing."
- "A successful multichannel OTT product to me is one which does more than just duplicate what cable TV is today. Live sports is not going away, but my gut feel is that these cord cutters, or cord nevers, are going to need a different kind of product to really take off-in sports and entertainment. If I was doing live streaming, for example, I would probably want Twitch to be part of my sports lineup."

Internet Usage

"It's too early to tell [whether ISPs will start charging more for bandwidth]. Just looking at the net neutrality debate. it's such a hot potato. And I think with so many [of the providers] being under merger scrutiny, it's a big snarl, and I don't think any of the operators want to attract any more unwanted attention [from the regulators]."

2) CEO of a company specializing in IPTV media networks and studio entertainment; repeat source

Sling TV's small selection of channels and limitations, like only being able to watch one stream at a time, suggest it may not be enough to lure pay-TV subscribers. Sony's Vue and Apple's upcoming streaming service may have a bigger effect because of a wider variety of quality content. Pay-TV operators are not likely to have much success with one-click sales of movies and TV shows that consumers can store on a DVR or in the cloud because options for doing so already are plentiful. Broadband providers are not expected to raise Internet pricing until the net neutrality dispute with the FCC is decided. However, they will eventually have pricing power, because consumers will be reluctant to move to lower broadband tiers once they have had a taste of high-speed service and/or unlimited data.

Cord Cutting

- "Sling TV seems to be targeting people who don't have any sort of pay-TV. Cord cutters would have to consider the channels they're getting for their \$20 and whether that's enough. These small OTT packages are just going to include a selection of the well-known channels, which would tend to exclude niche content owners like us."
- "Sling also has some other limitations that consumers might not like. You can only watch one stream at a time. Really, the price is the best thing about it."
- "Some of the other OTT deals coming out might be more appealing to newbies and regular cable and [satellite] subscribers. Sony's PlayStation [Vue] deal looks good and it will eventually be available on tablets."
- "Apple TV is the big gorilla lurking in the room. They look primed to offer more channels and they're doing deals with CBS, Fox and [The Walt Disney Co.'s Disney [DIS], so the content is there. They are supposed to offer voice control, which would annoy Comcast with their voice remote, and there's an optional home automation feature that's been talked about that would let owners use part of the OS to control lights and appliances remotely."
- "OTT, like any other delivery mechanism, is about the content-not just variety but quality. I think some of these early products like Sling will be studied very closely to gauge consumer response. We could see more channels for the same price or a little more, or a mix of different channels customers could choose from."

Apple TV is the big gorilla lurking in the room. They look primed to offer more channels and they're doing deals with CBS, Fox and Disney, so the content is there. They are supposed to offer voice control, which would annoy Comcast with their voice remote, and there's an optional home automation feature that's been talked about that would let owners use part of the OS to control lights and appliances remotely.

> CEO, Company Specializing in IPTV Media Networks

- "I still don't see cost as the wall holding back younger people from pay-TV. It's still about the delivery mechanism. They're either watching programs on a phone or tablet, or sitting in a bar watching a game, not hanging out at home."
- "There may be some people who'd quit pay-TV just to watch premium a la carte content like HBO Now, but that's probably a small number. If OTT a la carte got to the point where there was more choice in the content, that could



accelerate cord cutting. But the price would still have to be less than a pay-TV subscription with the same channels. Right now, it doesn't price out to be more affordable if you buy several OTT packages."

Pay-TV Strategy

- "Pay-TV operators come out with all sorts of promotions. Introductory rates now extend up to 12 months with some companies, where it used to be 3 months. These kinds of loss-leader deals get people signed up and hopefully hooked so the attrition rate is manageable enough to keep the promotions running."
- "Pro sports channels, ESPN, specialty sports channels—these channels are why a lot of consumers buy a pay-TV package."
- "Pay-TV operators will try streaming, probably on a limited basis with less than two dozen channels to manage their margins and see how it plays out."
- "At a \$20 price point, including ESPN channels as part of their package makes Sling TV a real draw for people interested mainly in sports. There has been a lot of consumer frustration about folding desirable sports content into a full pay-TV subscription, so this might be a case of where a la carte really makes sense."
- The market for buying digital content and storing it in the cloud is probably already saturated. Anyone who's serious about buying digital copies of movies, or renting them, or buying whole seasons of TV shows, is probably already set up on Amazon or Google Play. Pay-TV operators can certainly make the offer, but how many log-ins on different platforms will a consumer be willing to use?"
- "Getting Netflix on the set-top box makes sense because it gets people dependent on the set-top box. But it's not a huge deal for consumers. I don't think they care. You can buy a Roku box or even a cheap Blu-ray player that has a Netflix app preinstalled. If cable operators put the app on their boxes, it helps train consumers to stay on the set-top and not change their TV input to another attached device."

Internet Usage

- "I had thought the FCC would go along with the big telecoms in setting policy because Chairman (Tom) Wheeler used to be the lobbyist for their trade
- The market for buying digital content and storing it in the cloud is probably already saturated. Anyone who's serious about buying digital copies of movies, or renting them, or buying whole seasons of TV shows, is probably already set up on Amazon or Google Play. Pay-TV operators can certainly make the offer, but how many log-ins on different platforms will а consumer be willing to use?

CEO, Company Specializing in IPTV Media Networks

- association. Now it's looking like the FCC is girding up for a legal fight with the telecoms, which means no pricing based on bandwidth for a while. They're not going to sabotage their own case by switching from plans to hike fees on OTT companies to instead charging consumers based on their data streaming."
- "Consumers will try to get the fastest connection they can afford. That's where the telecoms can rope them in and raise prices later because it's awfully hard to go down to a slower speed or restrict your own data use once you've had a taste of 5 to 10 mbps with unlimited downloads."

3) Award-winning producer/director for a video content production company; repeat source

Sling TV will not cause any meaningful surge in cord cutting this year but the combined effect of multiple OTT services eventually will eat away at pay-TV subscriptions, with Apple's offering likely to lead the way. OTT providers will have to deliver a wider variety of content than movies and TV shows to steal pay-TV subscribers. HBO Now is a response to longstanding consumer demand and other premium channels will follow, including CBS' Showtime. ISPs are the ultimate winners because price hikes based on bandwidth usage are inevitable as consumers demand faster connection speeds that feed their appetite for data-intensive streaming content.

Cord Cutting

 "Sling TV by itself won't significantly increase cancelled cable subscriptions, but along with other services it will contribute to cord cutting. Apple TV might have the biggest impact because it's Apple. I think it will take at least another year to see the impact this has on cord cutting."



- "There's got to be more content available for OTT to appeal on a wide basis. Amazon and Netflix are the most successful examples of OTT, but they still offer mostly movies and TV shows. I think for people to really embrace streaming there needs to be sports, how-to programs, special interest shows-really all of the content that makes cable appealing-without the price."
- "The younger audience for entertainment streams or downloads everything. They don't care about 95% of what's on television. If there's a show on cable they really want to watch, they'll buy the episode or the whole season from Amazon or a similar service and keep it in their cloud."
- "HBO Now is what cable customers have been demanding for years. I think it's going to be very successful and other premium channels are going to follow that lead. CBS is supposed to offer something similar this year with Showtime. You can already get [Showtime] on a mobile device, but you still have to have a [pay-TV] subscription."

Pay-TV Strategy

- "To some extent, pay-TV operators will have to adapt and offer some OTT services. If they can maintain control over desirable content they can still do well, but to be responsive to their customers, there has to be some level of OTT content available."
- "[Pay-TV operators will] try several strategies. There will be smaller deals like Sling TV with maybe 20 or two dozen channels. And there will also be OTT content you can access anywhere, but it will still require a cable subscription."
- "Content owners will try to get their work on as many channels and delivery systems as they can. That could make their deals with pay-TV companies a little testy."
- "Live sports are still the No. 1 reason people pay for cable. If Sling TV is successful, if it turns out ESPN is one of the main draws for that service, then we'll see more live sports going OTT."
- "Most of what you see on social media is reaction to live news, not the live news itself. Sites like Twitter and Facebook are just another outlet for commentary."
- "Buying digital copies of TV shows and movies has been around for years. I don't know if pay-TV operators could make a splash with that. Apple and Google Play are the go-to sites for buying digital content and storing it in the cloud."
- "Cable operators that see Netflix as a potential partner rather than a competitor will add the app to their boxes. It's like adding another channel to your lineup. There's still a time delay on when Netflix can get newer movies and shows. They get a very small number of movies to stream soon after their theatrical release, but most of the time on-demand and pay-perview are going to have that content sooner than Netflix."

Internet Usage

- "Bandwidth price increases are inevitable, if not immediate. The big ISPs are getting their lawsuits ready to fight the FCC on their policy vote last month. I don't think anything major will happen, either with pricing or building out high-speed networks, until this is all over."
- "The demand is always there for faster and faster [Internet] speeds. I think people will get the fastest connection they can pay for. We might think 30 Mbps is fast, but the technology is there for 10 Gbps. At that speed, you can download an entire movie in less than 5 seconds, which sounds great unless you have to pay several hundred dollars a month."
- "The ISPs will eventually come out the winners on price. They'll build these networks with warp-drive speeds and charge accordingly. They have powerful lobbies and the FCC is just a speed bump to them."

Sling TV by itself won't significantly increase cancelled cable subscriptions, but along with other services it will contribute to cord cutting. Apple TV might have the biggest impact because it's Apple. I think it will take at least another year to see the impact this has on cord cutting.

> Award-winning Producer/Director Video Content Production Company

Live sports are still the No. 1 reason people pay for cable. If Sling TV is successful, if it turns out ESPN is one of the main draws for that service, then we'll see more live sports going OTT.

> Award-winning Producer/Director Video Content Production Company



4) Pay-TV executive with a major Hollywood film studio; repeat source

The more that OTT services are able to replicate the traditional pay-TV channel bundle, in a slimmed-down format, the more likely they will be to succeed. People want the major broadcast networks and sports, minus the dozens of channels they don't watch. Sony Vue and Apple appear to offer such a lineup but Sling does not. Another aggregator likely will emerge to address the problem of people paying separate bills for multiple OTT services. U.S. pay-TV operators will almost certainly all launch their own OTT services in much the same way as the successful Sky plc/LON:SKY launch of Now TV in the U.K. that targets a segment of viewers for whom the traditional top-tier pay-TV package was never attractive. Key elements to whether new OTT challengers will be successful is the strength of their on-demand and catch-up content.

Cord Cutting

- "The more [a competing provider] replicates traditional cable, the more chance they'll have [of taking those customers from the cable and satellite TV companies]. Sony Vue and Apple will have some success, if they're offering bundles people want, without all the channels most people don't want. If you've got the major [free-to-air] channels plus sports, then it will have a major impact."
- "All of the recent OTT announcements have to have some kind of impact on the [viewing landscape]. But in terms of any huge move away from the cable TV package this year, I don't know. Sony Vue and Apple TV are quite expensive from what I've seen, and the problem with Sling is that it doesn't even have the main free-to-air channels. I think you've got to have CBS, Fox, ABC, NBC. ... If you have to go and pay for those separately, then I can't see that working."
- "HBO going a la carte is quite a big deal. HBO resisted doing it for a very long time because they didn't want to upset their bread-and-butter cable operators. I've heard people say that they only subscribe to cable to get HBO, and that they will cut their cable cord as a result."
- "There's going to be a new aggregator. I don't see people paying seven separate bills for each service or channel. There's going to be another new aggregator, which is a slimmed down version of the cable operators."
- "A big part of this equation is: How lazy are people? If you don't have to think about having to buy a separate hook-up or set-up, and then have different bills to different providers. ... Most people just want everything done for them."
- "International pay-TV operators tell us that the people that take Netflix also generally have a pay-TV subscription. It doesn't cause people to cut the cord. It's an additional service."

Pay-TV Strategy

- "The pay-TV operators are already starting to offer slimmed down packages. Remember that the U.S. is behind many international markets on this. This has already been happening."
- HBO going a la carte is quite a big deal. HBO resisted doing it for a very long time because they didn't want to upset their bread-and-butter cable operators. I've heard people say that they only subscribe to cable to get HBO, and that they will cut their cable cord as a result.

Pay-TV Executive Major Hollywood Film Studio

- "I would study where BskyB [Sky] is going to see where the U.S. will head with all of this. They're so smart. They launched Now TV about a year ago, with the equivalent of Sky Deutschland and Sky Italia called Sky Online. It's an over-the-top platform with several tiers: a basic package, then one with Sky Movies-which is the equivalent of HBO."
- "All of the pay-TV operators in the U.S. are probably going to launch their own OTT services, which seems strange because it competes with their traditional offering. But Sky's take on it is that there are some people who like the traditional package, then there are others who never ever would have gotten the full cable or satellite set-top box and paid \$100-plus a month ... they're going after that demographic."
- "If you look at BskyB before they launched Now TV and where they are now, they've grown subscribers. [Launching their own OTT service] hasn't hurt them at all."
- "You've got to believe that there's going to be some cannibalization [from operators launching their own OTT services], from people who are on the fence with their traditional subscription, and find it too expensive. They probably will cord cut if they can get around to it. But I think we haven't seen mass cord cutting vet because these over-the-top offerings really are targeted at a different demographic-those that never would have signed up for the full cable and satellite platforms anyway."



ОП

- "Catch-up and DVR are also major tools the operators are using to keep subscribers at \$100-plus dollars a month. By catch-up I mean a show like 'Empire' launches, and you get to watch at least four or five episodes on an ondemand basis."
- "In looking at how successful these new OTT offering are going to be, look at whether they have good on-demand offerings including what we call 'rolling catch-up,' where catch-up watching is available for shows currently on the air."
- "The other thing that keeps people [tethered] is things like Time Warner's 'box-set' offering for a lot of shows, where you get all the episodes of a show on demand for no extra cost. Sky again has a ton of these."
- "EST [electronic sell-through] is really big with Comcast. I guess you could get that through Apple TV. BskyB has a really strong download-to-own EST offering now, which goes right to your box, and it's doing super well. People like it, because you've got so much storage on the box, or in the cloud, as opposed to devices like an iPad, which fills up so quickly. So this keeps people tethered to the box in a pretty important way."
- "Another thing to look at is ease of rental in addition to sell-through, which Apple obviously already has."

Internet Usage

N/A

In looking at how successful these new OTT offering are going to be, look at whether they have good on-demand offerings including what we call 'rolling catch-up,' where catchup watching is available for shows currently on the air.

> Pay-TV Executive Major Hollywood Film Studio

3) OTT Service/Software Providers

Sling TV will not lead to significant cancellations of pay-TV plans, according to all three sources. The service is a way for pay-TV operators to capture a segment of the market that has never had a pay-TV subscription, according to one. Wholesale cord cutting is unlikely until more live entertainment and sports programming is available online, one source said, and until it becomes cheaper and easier to put together a patchwork of different OTT services, two said. Apple's streaming TV service and Amazon Prime may have more success than Sling TV in convincing pay-TV subscribers to cut the cord, one source said. Pay-TV operators soon will offer their own versions of streaming-only TV services, two sources believe. Another expects more of them to cut deals to add a Netflix app to their set-top boxes. Broadband providers want to charge for Internet service based on usage rather than speed but are unlikely to make such a switch while the net neutrality dispute is ongoing, one source said, while another believes Internet pricing will eventually come down as competition among ISPs increases over the next decade.

Key Silo Findings

Cord Cutting

- 3 of 3 said Sling TV will not boost the rate of the cord cutting in 2015.
- 1 said Sling TV is a mechanism for bringing those who have never had a subscription into the pay-TV fold.
- 1 thinks Apple's streaming TV service could gain some traction and that Amazon could hurt pay-TV as more consumers become aware of the available content through Amazon Prime.
- 2 think it remains too expensive to build a package of OTT services.
- 1 said wholesale cord cutting will not happen until more live entertainment and sports programming is available through OTT.
- 1 said the OTT experience remains too difficult and disjointed for most consumers.
- 1 believes younger consumers eventually will be drawn into pay-TV subscriptions but 1 said most millennials cannot imagine why they would want hundreds of channels in a pay-TV package.

Pay-TV Strategy

- 2 expect more pay-TV operators to offer some version of streaming-only TV packages.
- 1 said consumers do not take advantage of TV Everywhere services to watch pay-TV channels because they don't know about such options or find it too confusing and difficult to access.





- 1 expects more pay-TV operators to cut deals to have a Netflix app on their set-top boxes.
- 1 said the market for one-click purchases of shows and movies is already crowded.

Internet Usage

- 1 thinks broadband providers would like to charge for Internet service based on data usage but are unlikely to move in that direction until the net neutrality dispute is resolved.
- 1 believes Internet service pricing will eventually decline due to more competition.

1) Mark Donnigan, media and entertainment director for Beamr, a developer of streaming video processing software

Sling TV is a good value but will not appreciably increase the rate of cord cutting, as most TV watchers still appreciate the value and convenience of the pay-TV bundle. Sling TV, HBO Now, Apple's forthcoming pay-TV offering and other new OTT services could result in some cord shaving, but cobbling together a host of such services in place of pay-TV remains difficult and is not much cheaper. The use of OTT services will grow but will be in addition to pay-TV subscriptions, appealing to people who want to watch movies and shows on mobile devices outside the home. Very few pay-TV subscribers take advantage of TV Everywhere options, either because they do not know it is available or because of confusion over what content they can watch on mobile devices.

Cord Cutting

- "Consumers are sort of fickle. They will complain about paying for 500 channels when they only watch 10. But the reality is, when you take away those 500 channels, they want them back."
- "Sling TV is a pretty darn good value. You've got sports with ESPN, you've got movies with EPIX, you've got Disney. For \$20 a month, there's something there to watch for almost anyone in the family. Yet, consumers want the 500 channels because maybe there's something on one of those odd channels that they didn't know existed that they would've never found."
- "It's not so clean to get the consumer to move off the way they currently buy entertainment in the home. It's one provider, one bill, one device, one remote. As soon as we go down the OTT path, you've got multiple apps, multiple devices. The user experience-even beyond what the interface looks like on the screen-it's really disjointed to use the Xbox for one service and the Roku for another. That still hasn't been solved and hasn't been addressed. Disjointed access is a large hurdle."
- "For early adopters, they'll say they've got this really cool Harmony remote that's all programmed up and in their house OTT is easy. But they're not even a tenth of 1% of the mass market. That's not the way most consumers live. That's why the pay-TV provider has a lot of power in the consumer home."
- "It's already become very clear to people that Sling TV at \$20 a month, that seems like a good deal. But now I need a movie package, so I add Netflix for \$9 a month. Now I want HBO so that's another \$15. And so then I need to bump up my \$40 broadband package for the higher speed \$65 package. I don't believe people are sitting down and mapping it out that way but they have an intuitive sense of the value and realizing their \$80 cable bill isn't so bad after all."
- "I am 100% certain that [pay-TV operators] will respond [to Apple and Sling TV] with competitive offers across the spectrum but short of a la carte. A la carte is a unicorn. It's not a matter of how the content is distributed-OTT vs. pay-TV-[a la carte] is not economically viable for the content owners where bundling reigns supreme."

It's not so clean to get the consumer to move off the way buy they currently entertainment in the home. It's one provider, one bill, one device, one remote. As soon as we go down the OTT path, you've got multiple apps, multiple devices. The user experience-even beyond what the interface looks like on the screen-it's really disjointed to use the Xbox for one service and the Roku for another.

Media & Entertainment Director Streaming Video Processing Software Developer

- "I don't think pay-TV must lose for Apple to build a nice business. The conversation is being painted as one party will win at the other's expense and I don't see this as a required outcome."
- "Even the mighty Apple cannot bend the laws of content rights and licensing agreements. One thing that doesn't get enough airtime in most of the press coverage I read is the fact that some of the issues that OTT digital distributors face with respect to content availability have to do with intensely complicated license agreements that bind content





to certain geographical restrictions or in the case of sports, even blackouts when a team is playing at home due to redistribution rights with a local network."

- "There are issues around advertising, sponsorship agreements, redistribution rights, content windows, etc. In short, even if a content owner or network wanted to ubiquitously open up their distribution for nearly everyone, they have certain regions or broadcast applications where they are legally forbidden from doing so. And guess what, not even Apple, Google or any massive tech company can circumvent this fact. If the content cannot be licensed, it cannot be licensed at any price. Just look at sports rights."
- "What we see happening with these new OTT offers-Sling, Apple, etc.-is not the formation of a winning pay-TV alternative but the coalescing of content bundles around popular platforms where people have a small entertainment bridge to devices outside the home. Sling, Apple, Sony Vue, etc., will be used by some as their sole access to entertainment, and yes, there will be a few cord cutters who avail themselves of these packages in lieu of a more expensive pay-TV bundle. However, the real application will be for entertainment hungry consumers who have always yearned to take their pay-TV package outside their home-vacation, second home, etc."
- "You may ask why they don't just use their pay-TV provider's TV Everywhere offer, and the answer lies in two parts. One is they don't know about it or it's too difficult to use and two is the [content rights barrier]. Believe it or not, the rights the pay-TV companies have to redistribute their content that was originally licensed for distribution over their managed network can be different from the rights an OTT vendor can negotiate even for the same content."
- "I do believe that pay-TV is aspirational [for younger consumers]. I don't buy the notion that people don't value entertainment-just look at how people spend money on concerts or sporting events. There are a handful of outliers for whom it's not part of their lifestyle, but that's not the mainstream consumers."
- "The college students, the cord nevers, the millennials-once you have your own child in the house, all of a sudden you're looking for the Disney channel. Some of it is just a place in life. It's not just about economics. You could have a great job and a salary but if you're 28 and single in New York

It's already become very clear to people that Sling TV at \$20 a month, that seems like a good deal. But now I need a movie package, so I add Netflix for \$9 a month. Now I want HBO so that's another \$15. And so then I need to bump up my \$40 broadband package for the higher speed \$65 package. I don't believe people are sitting down and mapping it out that way but they have an intuitive sense of the value and realizing their \$80 cable bill isn't so bad after all.

Media & Entertainment Director Streaming Video Processing Software Developer

City, you're going out at night. You're not staying home and watching TV. But when you're 32 and married and have your first baby, it changes."

"What I see happening, and the reason why there's great promise around digital distribution, is you have a proliferation of devices that open up the opportunity for entertainment outside the home. Now I have the ability to pay an extra \$9 per month for Netflix that I can watch in a hotel on the road. There is incredible opportunity for various content services and content

owners that are building direct-to-consumer services. But I think the notion that it's a swap out-that HBO is going to switch to an all over-the-top model, I don't see that. I see an additive scenario."

"I'm uncomfortable with the discussion that these services [like Sling TV] are really going to hurt pay-TV. We buy things that enhance our lifestyle and the way we consume entertainment. People are making choices based on that rather than the idea of wanting to stop giving Cox \$100 a month. Some of the consumer research seems like it's going in looking for the conclusion that people want to cut their cable bill and I don't know if that's true."

Pay-TV Strategy

"[Pay-TV providers] are clearly competing on price. They have that tool at their disposal. They can come in and offer me a great promotional price. And they're putting together bundles, combinations of existing services like HBO Go with their own selection of channels. The MSOs can also bundle a package of [TV and Internet] services for, say, \$99 a month that includes a sufficiently fast broadband connection and a basic cable package. I'm

The pay-TV providers have a lot of resources available to them and have a lot of smart people working for them. None of them are just sitting back and assuming he business is always going to be there. They're being very aggressive and analyzing the consumer trends. Don't bet against them.

Media & Entertainment Director Streaming Video Processing Software Developer



seeing \$49 start-up packages with basic Internet and TV. That is a pretty darn good deal and pretty hard to compete with.'

- "The pay-TV providers have a lot of resources available to them and have a lot of smart people working for them. None of them are just sitting back and assuming he business is always going to be there. They're being very aggressive and analyzing the consumer trends. Don't bet against them."
- "It is very clear that they are marketing very heavily a broadband package with an OTT solution [for TV]. It's very interesting how they're positioning it. If you peel it back, it's cable TV. But if you look at the marketing material, you would assume it was basically Sling TV. They're offering HBO Go, an iPad app, an OTT-like experience. It's really cable TV plus OTT."
- "The consumer is not watching [pay-TV channels on mobile devices through TV Everywhere] widely. Only a small number are. It's a combination of just not being educated about it-they just don't know it's available-or it gets back to the technology barrier. It's not a one-click or universal password. It's like UltraViolet. When you actually get it all configured and set up, it is super cool. It is amazing. But how many people have actually gone to that trouble? There's just too high of a use cliff."
- "The first time the consumer encounters that [confusion over what pay-TV content is available on a mobile device] ... all they know is they're paying for the content, they're told they can watch on their iPad and then it's not available. Then they're further [angered] or they're just confused and won't even try again."
- "[Pay-TV operators] are very comfortable clinging to the customer and holding ARPUs [average revenue per user]. Maybe it was 30% Internet [revenue] and 70% video. I think they're perfectly happy with that flipflopping. The margins on data are much higher than on video. I don't think that Comcast is saying they're OK with losing 50% of their video customers as long as they're making it up on the Internet side, but fundamentally, what they're saying is that if people are going to cut video, they need them to buy them more data. There is an understanding that they're trading dollars."
- "When the first announcements [of Netflix signing deals to have its app on cable set-top boxes] came out-I think Virgin in the U.K. was one of the first-it didn't completely surprise me. I think it's going to come down to what the attitude of a particular pay-TV operator is, even down to whether the chief executive has an axe to grind with Reed Hastings. There's a handful of well-known media and entertainment heads that have gone toeto-toe with Netflix and for them it may be hard to swallow their pride and cut a deal."

The first time the consumer encounters that [confusion over what pay-TV content is available on a mobile device] ... all they know is they're paying for the content, they're told they can watch on their iPad and then it's not available. Then they're further [angered] or they're just confused and won't even try again.

Media & Entertainment Director Streaming Video Processing Software Developer

- "For the rest of them, who maybe behind closed doors were plotting plans to kill Netflix a few years ago, now probably see the evidence is very clear that Netflix is additive. Something like 20% of pay-TV subscribers have Netflix. So let's figure out how to enable that experience to keep them on our set-top box and keep them in our sandbox. Why would we want someone to switch off our input and switch over to a Roku box? Is it going to be a wholesale shift and everyone is going to have a Netflix app on their box? No. But there will be more deals announced."
- "There is a technology hurdle-some of these set-top boxes can only support a very rudimentary Netflix experience. Comcast's X1-that's a very capable box but someone who is still rolling old Motorola boxes, they just can't do it technically."

Internet Usage

N/A

2) Executive with a content-related technology company

The probability of a major increase in cord cutting this year is small, though Apple has a chance to attract a meaningful number of subscribers as soon as its streaming TV service launches. Longer term, Amazon Prime may be the sleeping giant which moves the dial on OTT viewing habits-far more than newer offerings like Sling TV and HBO. Many Amazon Prime customers buy the service for free shipping, and remain unaware of the availability of huge amounts of quality





content. Awareness will start to grow, especially now that Amazon is making more original content. Broadband pricing eventually will come down as service providers face new competition over the next decade.

Cord Cutting

- "I don't think [Sling TV, HBO or Apple TV] will move the dial this year [in terms of an increased rate of cord cutting]. I don't have super confidence in that answer, because in this day and age things can change rapidly-and Apple has a history of defining categories and taking-or creating-huge markets. Nonetheless, I don't think it's going to move things very fast."
- "Apple will definitely get some buy-in right out of the chute. People just want to give Apple money. I was at Apple when the [now discontinued digital personal assistant] Newton was introduced, and people bought it without knowing what it was."
- "I don't even know what [DISH] is thinking with Sling TV. I don't think they've done a good job of explaining what it is."
- "Even until recently, the whole notion of unbundling [pay-TV channels] was preposterous. Time Warner Cable and Comcast had huge control over their packages, and it was only through regulation that they were forced to come up with a basic tier of service-which they didn't actually advertise."
- "So it's with a tremendous amount of glee that I see HBO has somehow found a way, from a business perspective, to retain their revenue from the bigger operators and still offer an over-the-top, a la carte service. I don't know how HBO did that, because I've heard stories for years that they were tied to the revenue from the cable operators and couldn't possibly go it alone. Of course, they're owned by Time Warner, which might be one source of their revenue to make up for any shortfall in the interim."
- "We're going to see the a la carte offering that consumers have said they've wanted for so long. However, I also think that the a la carte prices, at \$15 for HBO, are expensive. When you add four or five channels together, you're paying as much as you would for a basic bundle, but with much fewer channels."
- "I don't think those people who get a pay-TV package with HBO included are going to cut the cord just because HBO is available a la carte. I think the price is wrong."
- "Consumers aren't necessarily going to save money [with OTT services]. They're going to pay the same amount of money and get fewer channels. So I don't think the consumer's going to win just yet."
- "In my travels, I see millennials-the cord nevers-starting with Netflix as the staple, and then just whatever's available on Roku, which is very popular. And then if they or their parents subscribe to Amazon Prime, they get all the content. I think [with all of those services] they're getting enough of what they want, and because they've never experienced Comcast's hundreds of channels, which used to be [the pay-TV companies'] value proposition, millennials can't imagine why they would want hundreds of channels."
- "The YouTube channels [are a much bigger threat] to pay-TV operators [then some of the newer OTT offerings like Sling TV], as is Amazon Prime."
- "The interesting thing about Amazon's content is that a lot of people do Amazon Prime just to get the free shipping, but don't know yet that they can get all this free content. When they figure that out, then it's a whole other population that's going to be watching over-the-top services and not paying any more than what they're paying now."
- "If Amazon really starts to capitalize on making its customers more aware that they're getting something for nothing, that could result in a real shift [from traditional pay-TV]."

Pay-TV Strategy

- "There will be a consolidation of [pay-TV] operators [and networks]—but not for a while. I don't think any of them are going to die quickly."
- "I'm hoping there's a landscape where a lot of small operators can still make a business. For example, if somebody wanted to start an OTT business for a monthly fee, which was very special interest, niche content offering, that would be great-like an independent film service."

I see millennials-the cord nevers-starting with Netflix as the staple, and then just whatever's available on Roku, which is very popular. And then if they or their parents subscribe to Amazon Prime, they get all the content. I think [with all of those services] they're getting enough of what they want, and because they've never experienced Comcast's hundreds of channels, which used to be [the pay-TV companies'] value proposition, millennials can't imagine why they would want hundreds of channels.

Executive, Content-related Technology Company



ΟΠ

- "The [MVPDs] make a lot more on electronic sell-through [EST] than they do on video-on-demand and rental. But one of the problems is downloading these 12K movies. They're really big [files]. So I think EST, where the delivery mechanism is an ultra-high-definition disc, is one possibility."
- "The question is, will consumers really embrace the model of having a file server in their house, with a bunch of movies on it? Or will they just keep a bunch of movies on their shelf and pull them out as they want and watch them? My opinion is that consumers aren't ready for the home file servers."
- "The Blu-ray Disc Association has announced a new format for ultra-high definition. We'll be seeing that soon. I was talking to someone from FutureSource last week, and his observation was that DVD sales are not going down as fast as was projected, and that Blu-ray disc sales are going up. He anticipates that the ultra-high definition version of Bluray will continue that trend. It's sort of like vinyl records, which have had a resurgence and are increasing year over year."
- "In the areas where I work, the layers of security are increasing and the studios are just as worried, if not more, about copyright protection. But there are now a lot of companies that can provide security pretty readily, and there are much easier ways to integrate the technology into consumer products than there used to be. So I think the security is actually increasing, but the burden of price, development and other factors is coming down-just as with any technology curve."

Internet Usage

- "Consumers have come to expect more-and pay less-when it comes to technology. And I think without really knowing what impact they're having on the infrastructure, they're moving increasingly to watching video on the Internet and less so on cable."
- "There's some huge percentage of content that DirecTV delivers by Internet, for example, and this is increasing demand on the networks. There's increasing investment in the infrastructure for this reason. And while the ISPs are making a lot of money now, they should make it while they can, because [the rapid increase in video streaming] will mean they have to charge less, and they're going to have more expenses in terms of build-out and operations."
- "On the Internet service side, they'll have to charge less when the regional monopolies break down. Right now I have no other option than Comcast, but this will change. They're charging too much money now for what they're providing, and I think something will give-[perhaps] Google will light up enough fiber in enough neighborhoods to provide actual competition."
- "And then once it's demonstrated that the incumbent ISPs can offer their services at a lower rate when there is competition, I think the FCC-unless it's a Republican government next time around-will start to look at this and put some regulations on pricing-which they're already starting to do under the new [net neutrality] rules."
- "But I think these changes won't happen any time soon. Probably five to ten years."

3) Founder of a software development company specializing in streaming media; repeat source

Sling TV will not encourage cord cutting, but rather will serve as a gateway to bring new customers into the pay-TV fold.

Widespread cord cutting is unlikely until OTT packages offer a significant variety of live entertainment and sports, which will not happen this year. Younger consumers are more concerned with access to content on mobile devices than they are with the cost of entertainment. Pay-TV operators are developing their own OTT services to meet these changing demands. ISPs likely will not raise consumer broadband pricing until any legal challenges to the FCC's net neutrality policy are resolved.

Cord Cutting

- "Pay-TV subscribers aren't going to cancel their service for Sling TV. It's a small content package that, if anything, will spark interest in people who don't watch pay-TV. It's a gateway to possible upsells, a way to get new customers in the door at an attractive price."
- "If we're talking about movies and TV shows. OTT has arrived. There is some premium content still unavailable for streaming, but for the most part, once a movie ends its theatrical run you can pay to watch it online."

Pay-TV subscribers aren't going to cancel their service for Sling TV. It's a small content package that, if anything, will spark interest in people who don't watch pay-TV. It's a gateway to possible upsells, a way to get new customers in the door at an attractive price.

> Founder Software Development Company



- "True OTT [with no pay-TV subscription] will have to involve live entertainment and sports. That means negotiating licensing fees and carrying agreements. That won't happen in a major way this year, certainly not with any programming that's locked up in an exclusive deal with the cable and satellite outfits."
- "I don't know that it's all about cost with millennials. I think it's more about access and lifestyle. This is a group that wants to watch on mobile devices when it suits them, so whoever can deliver on that demand wins the Millennial business. That's part of the reason we're seeing all these OTT products in the news. There's more flexibility in viewing this content, both in location and time of day."
- "HBO Now is not going to cost cable companies their subscribers. HBO by and of itself is not why cable subscribers pay for their service. It's for the variety of content they can get. These a la carte services are for people who are probably after a single show or a couple of programs, but they don't want cable and they don't want to get locked into anything. They're also paying a premium for that."
- "At \$15 a month, you only get select offerings from HBO, versus \$18 to \$20 per month for everything on the channel as part of a cable subscription. Another thing I don't think consumers realize is if you are only interested in a single show, buying a season pass or even individual episodes on Google Play or Amazon is less expensive than HBO Now. On that basis, the only real advantage I see with HBO Now is being able to watch shows at the time they air, instead of waiting a day if you buy a season pass."

Pay-TV Strategy

- "Pay-TV operators are coming up with their own OTT deals. Sling TV is just DISH-lite. It's not like pay-TV is going away. More likely, the delivery mechanism is changing to reflect the reality of how consumers want to receive entertainment."
- "Live sports programming will keep cable subscribers hooked until there is a different way to access that content."
- "Putting ESPN on Sling TV was a smart move. I do think it will lead to more streaming options for sports, but those could come from pay-TV [operators] in the form of new OTT services."
- "I see Twitter and Facebook as an interactive part of the viewing experience, a place to comment, not a replacement site for viewing live content on TV or a mobile."
- "I'm not sure pay-TV operators want to get into buying, renting and storing content. There are a lot of players already in that space. Google Play, Amazon, UltraViolet and all the platforms it supports. I've got to believe that consumers do not want their purchased content stored on three or four different platforms. Maybe if pay-TV operators can sign up customers who are new to buying digital titles so they start with one home to store their purchases."
- "Some cable operators will probably negotiate with Netflix on adding the app [to set-top boxes]."

Internet Usage

- "ISPs would certainly like to charge for bandwidth and they'd probably be justified in doing so as the network demands keep growing. It may not happen this year, or at least until the outcome of any legal challenge to the FCC's net neutrality vote."
- "I'm confident consumers buy the fastest service they can afford. If they are cord cutting, the savings would certainly justify the cost of a speed upgrade."
- "Net neutrality hasn't really been resolved. I think we just finished Round 1."

4) Industry Specialists

None of these four sources expect Sling TV to boost the rate of cord cutting in 2015. Sling TV is aimed at getting consumers with no pay-TV subscription to start buying a TV package, two sources said, with three suggesting that millennials will eventually buy pay-TV services as they get older. Sources were split on the effect on HBO Now, with two suggesting it could lead to more cord cutting but two others questioning whether it will be a major draw. It's difficult and expensive to put together a lineup of OTT services that matches pay-TV for content, two sources said, though one thinks Apple's forthcoming streaming TV service could be strong enough to change the dynamics. Pay-TV operators likely will introduce more streamingonly TV packages, three sources said. They also will try to keep subscribers through improved set-top boxes with voice

ISPs would certainly like to charge for bandwidth and they'd probably be justified in doing so as the network demands keep growing. It may not happen this year, or at least until the outcome of any legal challenge to the FCC's net neutrality vote.

> Founder Software Development Company



controls and more DVR storage, according to one. It will be difficult, however, for pay-TV providers to succeed with one-click purchasing of shows and movies, two sources said. Three sources said broadband providers are not likely to move to a usage-based Internet pricing model this year, but one does expect such a change.

Key Silo Findings

Cord Cutting

- 4 of 4 said Sling TV will have minimal effect on cord cutting in the near future.
- 2 said Sling TV is not aimed at existing pay-TV subscribers, but is seen as a way to get non-subscribers in the door.
- 2 think it remains difficult and expensive to cobble together a package of OTT services that rivals pay-TV for content.
- 1 said the inability to watch multiple streams on multiple devices at the same time on Sling TV is a serious drawback.
- 2 think HBO Now could have a bigger effect than Sling TV on cord cutting, but 2 others said the limited content on HBO's streaming service will keep it from being a major draw.
- 1 believes Apple's streaming TV service could hurt pay-TV if Apple shows a willingness to pay for top content and makes the service available across all its devices.
- 3 think millennials will eventually become pay-TV subscribers as they get older.
- 3 said sports programming continues to be the biggest draw for pay-TV.

Pay-TV Strategy

- 3 expect pay-TV operators to introduce more streaming-only TV packages, especially if Sling TV has some success.
- 2 think it will be difficult for pay-TV operators to gain much traction with one-click purchases of shows and movies.
- 1 said pay-TV operators are trying to keep subscribers by adding new features to set-top boxes, such as voice controls and more DVR storage. The same 1 thinks operators should also add a Netflix app to set-top boxes.

Internet Usage

 3 do not foresee broadband providers moving to a usage-based pricing model this year, while 1 does expect a move in that direction.

1) David C. Tice, senior VP, consulting, GfK Media and Entertainment

HBO and ESPN going a la carte will have a far bigger effect on the pay-TV subscription landscape than Sling TV. Sling's major drawback is the ability to watch only one stream on one device at a time. There is some evidence of millennials coming back to the pay-TV fold as they get older, but the youngest group of adults (18-25) may never subscribe, and older viewers likely will increase cord cutting as OTT devices get easier to use. Other networks likely will try to follow HBO and ESPN with streaming-only offerings, but it will take a strong network brand and quality content to succeed. ISPs likely will start charging consumers based on bandwidth use in 2015, especially since recent net neutrality rulings closed the window for content providers to pick up the tab. Ultimately, it's the consumers who pay for bandwidth, meaning ISPs are the winners.

Cord Cutting

- "I don't think [Sling TV] will be a major factor [in cord cutting], with the tide being driven by the SVOD [subscription video on demand] services. Its major drawback is that you can only watch one stream on one device at a time. HBO Now is likely to be much more influential."
- "Technically, ease of connecting and use [is the biggest barrier to OTT] probably pretty much resolved by now."
- "Content [wise], access to major sports is still an issue [preventing cord cutting] unless ESPN goes beyond Sling TV. Access to premium [content] seems to be over the hump with HBO Now."
- "Consumer confusion is a big issue [for OTT use] and not resolved. How do consumers structure their own bundles that address all their content wants? They may well find it's more expensive and more work to go OTT once all costs, and Internet connection costs, are considered."
- "Yes, we do see older millennials coming back [to pay-TV]. It's the youngest

Consumer confusion is a big issue [for OTT use] and not resolved. How do consumers structure their own bundles that address all their content wants? They may well find it's more expensive and more work to go OTT once all costs, and Internet connection costs, are considered.

> Senior VP of Consulting GfK Media & Entertainment





group of adults, 18-25, who may end up not coming back to the fold. Older viewers are much less likely to cut [pay-TV], but the increasing ease of OTT devices and services will likely increase their cutting levels."

"HBO and ESPN going a la carte are the two biggest potential moves and will have a big impact. Other networks are likely to try to follow, but it will take a strong network brand and content to be successful."

Pay-TV Strategy

- "[Pay-TV operators] have been offering new packages to address cord cutter/[cord] never needs, and that is likely to continue [in response to Sling TV and other offerings]."
- "Sports programming will continue to keep people tethered to their pay-TV subscriptions. Live programming, or the ability to watch content sooner than a week after broadcast, might [also do that]".
- "All content will migrate towards OTT options, sports or not. It will depend how long it takes to get to that stage."
- . "That ship [of people getting information from social media] has already sailed on news, and its effect should already be built into the market. But when events happen, people will turn to the TV for more coverage, or for local news."
- "The studios have had little success in selling digital ownership of movies. It seems people want rentals or subscriptions when it comes to digital versions. I don't see pay-TV being any more successful in selling owned digital copies, especially if there is no allowance for people to transfer those purchases if they move, change providers, etc."

"Cable operators will eventually cut deals with Netflix for the app on their set-top boxes. When is the question."

Internet Usage

- "There will be a move in this direction [for ISPs to start charging consumers based on bandwidth usage in 2015], especially since the net neutrality regulations killed off the chance for the content services to pay for that bandwidth. Someone has to pay for it!"
- "Ultimately it comes out of the pockets of consumers. If Netflix had to pay, then they'd have passed that charge to subscribers. Now, users will have to pay to get faster service."
- "In a way, it's more fair that heavy users pay more rather than having that cost shared by all subscribers to an SVOD service. It may, however, discourage pay-TV operators from upgrading or evolving their plant in the same way they might have with hefty payments coming in from various services."
- "Most people are unaware of what [Internet speed] they have, and I think basic service is sufficient for most homes. I don't see an equal offset [of consumers upgrading Internet packages while cutting TV services]."

2) Jason Anderson, strategic advisor to pay-TV operators; repeat source

Sling TV will not be a major game changer. It is expensive and DISH can't bundle it with fast internet to attract subscribers. Sony's PlayStation Vue faces similar challenges. HBO's OTT service is a bigger deal, but not many premium cable brands will be able to follow suit, given their weaker overall content and the backlash they face from Comcast and other providers. Apple TV, on the other hand, could shake up the industry if it is available on a wide variety of iOS devices.

One major shift in the landscape is the willingness by content providers to cut deals allowing for more mobile viewing, despite the higher security risks that come with mobile streaming.

Cord Cutting

- "The big issue with Sling TV is that it's expensive, relative to its attempt to put out a cord-cutter line-up."
- "The reality is that it's not aimed at cord cutters at all. It's for people who are more cost-conscious when it comes to what they want to pay for on the TV side, and it's a hook to get them in the door."
- "If you look at who might actually buy Sling, based on the average age of viewers of the channels in Sling's lineup, it may not be primarily geared to cord cutters but lower-end traditional pay-TV customers."
- "Bundling is still a very big deal. It's going to be hard for [DISH] to rack up customers [for Sling] given that cable providers can bundle their [TV] packages per-customer with Internet-especially as [cable providers] add loads more hotspots, enabling customers to view more content for free."

Millennials will continue to come back into the [pay-TV] fold as they earn more money. One recent study shows half of millennials' income is already going to pay-TV. It may be delayed by a few years more, three to five years tops, but most are still eventually going to get some kind of pay-TV subscription.

Strategic Advisor to Pay-TV Operators



ΟΤΤ

- "I don't know what [DISH's] goals are for the service. Maybe they can get 500,000 subscribers, but I think even that's going to be hard."
- "Many millennials are only interested in Internet service, free hot spots and free data-if it comes with free pay-TV then great. I think that's a lot of the mentality of both millennials and those who'd consider themselves cord cutters, or cord traders [trading the pay-TV cord for faster Internet].
- "Sony faces the same hurdles with its new offering-maybe even more so. I don't think [PlayStation Vue] is going to go anywhere in terms of direct net income. They're going to have to charge a lot because they're being forced to carry most-if not all-channels available from major network groups. And PlayStation Vue doesn't come with any Internet or phone service-another big strike against it."
- "Millennials will continue to come back into the [pay-TV] fold as they earn more money. One recent study shows half of millennials' income is already going to pay-TV. It may be delayed by a few years more, three to five years tops, but most are still eventually going to get some kind of pay-TV subscription. Because they either want ESPN and all the cable networks, but the real hook is the fast Internet."
- "HBO going a la carte is a bigger deal than Sling TV. They have premium movies and shows-much more so than Showtime and Starz. HBO is a much more significant brand-by a country mile."
- "I don't think a lot of the even higher-end basic cable networks will follow HBO and go a la carte because of the backlash that they face from the Comcasts of the world."
- "As a company back on its game with Tim Cook now the king of the corporate world, Apple finally seems ready to turn its Apple TV 'hobby' into something of real substance. If Apple goes with a cross-iOS devices service that's more along the lines of Sling TV than Sony Vue, watch out."
- "Like most tech companies, Apple seems to have previously had the classic problem of not wanting to pay top dollar for content and believing that the devices are just as or more important than the content riding on it. If they get over that hump a la iTunes, this could be a true game changer."
- "Notice also the potential impact of the FCC opening the door to MVPD status for web-based TV operators-perhaps soon to include the most valuable company in the world."

Pay-TV Strategy

- "I can tell you that the main shift in this landscape, even in the last few months, is the level of openness that the networks, the content owners and providers have towards allowing their content to stream to more mobile devices as part of the service, where the security is much weaker."
- "An Apple iOS device, for example, does not support the same level of security of a typical set-top box and is therefore much more susceptible to unpaid viewing."
- "One project I'm working on right now involves a mainly mobile [user population]-living rooms are rare and there won't likely even be significant desktop viewing. I've had one very large network group say to me that their president had wanted to push into [this particular consumer segment], and the network's appetite [for agreeing to content streaming over less secure devices] has really shifted. They're now considering it seriously, whereas

Apple finally seems ready to turn its Apple TV 'hobby' into something of real substance. If Apple goes with a cross-iOS devices service that's more along the lines of Sling TV than Sony Vue, watch out. ... Like most tech companies, Apple seems to have previously had the classic problem of not wanting to pay top dollar for content and believing that the devices are just as or more important than the content riding on it. If they get over that hump a la iTunes, this could be a true game changer.

Strategic Advisor to Pay-TV Operators

until quite recently security issues would have held the deal up. It's amazing how quickly this has shifted. It's all driven by demand from the consumer."

"Although I did see Les Moonves saying CBS is holding back out-of-home rights, as [the network] realized these rights were becoming more and more valuable."

Internet Usage

- "Bandwidth caps come with a huge perception and PR problem. I think what ISPs are probably going to do, more than [charging for bandwidth], is increase the capacity of each level. So you've seen a lot of [ISPs] say to a subscriber who is at 50 Mbps bump [the bandwidth] up to 75 Mbps for free."
- "It's going to be a big issue for [ISPs] to cap data, when their margins [on Internet] are already at 70%. Politicians can make an easy living attacking that kind of thing."
- "I don't see [the new net neutrality rulings] affecting operators terribly. It will have some material impact-probably a few hundred million dollars a year [in lost revenues for the ISPs]. But I think if the FCC focuses very specifically on



this idea of [stopping ISPs] getting paid on both sides—where the user is paying for Internet access and then Netflix is charged for quality of service—as long as the FCC does what it says it's going to do, the ISPs will be fine."

- "If the FCC forbids ISPs from charging consumers as well as content providers but follows through on its claims to not want to touch ISPs' ability to offer 'fast lanes' and carve-outs whereby customers are assured the best possible experience and aren't charged for content viewed out-of-home accessed via an ISP's hot spots, then the value proposition will remain powerful in an increasingly 'Internet first' marketplace."
- "One factor, though, that might limit the competitive advantage of operators who have invested billions in broadband infrastructure, will be how aggressive the FCC is in requiring ISPs to sell access to those networks to third-parties. That would cut into the lead of Comcast and others but the overall value to consumers should keep heavyweight ISPs in front."

3) Dan Rayburn, executive VP of <u>StreamingMedia.com;</u> repeat source

The rollout of Sling TV, Apple TV and other streaming-only TV packages will do little to increase the slow pace of cord cutting. Such services are not aimed at pay-TV customers, but rather at younger consumers who cannot afford or have never chosen to subscribe to pay-TV. Pay-TV cancellations often are offset by increased Internet subscriptions through the same service provider. OTT cannot replace pay-TV without widely available live sports, and this source doubts pro sports leagues and college conferences will alienate cable companies by cutting deals with OTT services. Sling TV's twochannel ESPN offering is different because the OTT operation is a division of DISH, not a direct competitor. More OTT packages from traditional cable operators are probable in the next year to match what Apple, Sony and others are offering.

Cord Cutting

- "Sling TV, Apple TV, Sony TV-all of these are a direct appeal to sell young people some form of television programming and also to people who either cannot afford or never had pay-TV. The idea that selling something is better than selling nothing is what applies here."
- "We're still not seeing a level of cord cutting that would support all the gloom and doom about pay-TV. These cord cutters or cord shifters still amount to less than 1 percent of all U.S. pay-TV subscribers in any quarter since 2012."
- "Live sports is absolutely what keeps a lot of subscribers tethered to pay-TV."
- "There's no significant gain for OTT without sports programming. The pro leagues and college conferences are raking in billions from cable operators, so why would they mess with a good thing? People get excited and point to an OTT service like Sling TV offering ESPN, but remember, they're owned by DISH. They're not a competitor with DISH Network."
- "ESPN is on Sling TV only because DISH owns Sling TV. I think for a while we're only going to see live sports streaming OTT on services owned and operated by pay-TV companies."
- "What do millennials want? Nobody has any definitive answers, but it seems fairly clear they want video on their smartphones and tablets, and they go to the sites where that's available-Netflix, Hulu, Amazon."
- "There's always talk that millennials will never buy pay-TV. I say the day will come when a lot of them will get married and stop going out every night, and suddenly pay-TV looks pretty attractive."
- "I'm not convinced that HBO Now at \$15 a month is a good deal. The content is limited. I also have to wonder how many people signed up for cable just to watch HBO. Probably not many. I think it's a somewhat daring move by HBO to offer this OTT content when their livelihood has always been cable providers. But they're part of Time Warner, which is trying to get in bed with Comcast, so maybe the prospect of being part of that Goliath is giving HBO more confidence to try out these OTT plans."

Sling TV, Apple TV, Sony TV-all of these are a direct appeal to sell young people some form of television programming and also to people who either cannot afford or never had pay-TV. The idea that selling something is better than selling nothing is what applies here.

Executive VP, StreamingMedia.com

There's no significant gain for without OTT sports programming. The pro leagues and college conferences are raking in billions from cable operators, so why would they mess with a good thing?

Executive VP, StreamingMedia.com



Pay-TV Strategy

- "On the pay-TV side, we're seeing lots of new features on the set-top box, bigger DVR storage or cloud storage, voice-actuated controls and the ubiquitous Triple Play bundle."
- "If Sling TV works out for DISH, more pay-TV operators will dive into OTT with these basic little programming packages so they can keep on top of Apple and Sony and anyone else who decides to play in this space."
- "People watch live events on TV or a tablet, maybe their phone. They comment about the news on Twitter and Facebook. These are complimentary activities."
- "Cable operators really ought to consider adding Netflix to their set-top menus. It's better business than having your customer switch over to a Roku box or hop on a tablet."

Internet Usage

- "I don't see usage-based pricing coming into play this year. ISPs are trying
- to encourage customers to stream and download videos. Once it's a habit, then I would expect some kind of tiered or metered data charges."
- "The debate on net neutrality isn't over. The FCC's policy ruling just laid the groundwork for more arguments."

4) Intellectual property attorney in the arts and entertainment industries; repeat source

Sling TV and other OTT services will contribute to the gradual erosion of pay-TV subscribers, although in many cases the shift will be more akin to cord shaving than cord cutting. Amazon and Netflix remain the leaders in OTT. Apple's streaming TV service could be a strong competitor when it launches. Pay-TV operators will offer a mix of streaming services in response to these trends, while investing more in broadband. ISPs are not likely to increase prices based on data usage until after the anticipated lawsuits against the government are resolved. Price is not the major reason that millennials are reluctant to subscribe to pay-TV; it is a lifestyle issue. As they forge relationships and start families, millennials are likely to be more home-bound, making pay-TV a more appealing option.

Cord Cutting

- "I see Sling TV as part of a gradual erosion of cable subscribers. It's important, though, to realize that some of these subscribers will continue to buy entertainment from these companies. The delivery method is changing from cable lines and satellite signals to broadband. So pay-TV companies aren't going away. They're evolving."
- "Content means everything, whether it's OTT or pay-TV. If you can acquire the rights to content people want, you have a viable business. That's the real challenge facing OTT services. Apple can do it. Amazon and Netflix are already doing it. With Netflix, they've built the business to the point where it is feasible to produce their own content."
- "Each generation as it gets older undergoes a shift in priorities. You can call them Baby Boomers, Gen X or millennials, but each group at some point starts relationships and families, and as it concerns our current group, there's less time and maybe less interest in texting at nightclubs and swapping video links. Staying home becomes more commonplace, at least on weeknights. That's when pay-TV becomes desirable."
- "It's hard to see the cost of pay-TV as a barrier to entry for millennials. It's more a choice of priorities. A night out can quickly add up to the cost of a month of cable."
- "HBO Now only includes what they call the best of HBO, meaning that you do not get all of HBO. It will be interesting to see if their pricing is in line with what people are willing to pay for limited content. I don't think people are going to cancel their pay-TV to stream HBO. It's more like an intermediate

Each generation as it gets older undergoes a shift in priorities. You can call them Baby Boomers, Gen X or millennials, but each group at some point relationships starts and families, and as it concerns our current group, there's less time and maybe less interest in texting at nightclubs and swapping video links. Staving home becomes more commonplace, at least on weeknights. That's when pay-TV becomes desirable.

> Intellectual Property Attorney Arts & Entertainment Industries

I don't see usage-based pricing

coming into play this year. ISPs

download videos. Once it's a

habit, then I would expect some

kind of tiered or metered data

Executive VP, StreamingMedia.com

to

to

encourage

and

stream

trying

are

customers

charges.



level of service for people who are aware of the great shows on HBO but don't have cable. It's no coincidence that HBO Now launches just as Season 5 of Game of Thrones is set to begin."

Pay-TV Strategy

- "Some operators will offer their own OTT packages. Others will look at ways to trim their current packages and save costs. I think everyone will be pouring more resources into broadband."
- "Weekend sports on pay-TV probably keeps more subscribers on board than any other programming."
- "Getting ESPN on an OTT service was a big development. It suggests these premium sports channels are willing to play with anyone who can negotiate the licensing costs. I do think we'll see more sports shows and live events on streaming services."
- "I don't know all the details of these one-click business models other than it's largely based on volume. The sell-through platform, like Google Play, gets a piece and the content owners take a chunk. If the purchase resides on the cloud, the company managing the cloud also gets compensated for storing the digital content. I think pay-TV operators might have some success with [selling] TV content, probably niche content or shows with a regional appeal. Amazon, Apple and Google probably have one-click movie buying locked up."

Internet Usage

- "I don't expect a lot of price movement on bandwidth use until there's something final on net neutrality. ISPs will hold off on any price increases until after their pending lawsuits are settled with the FCC. Any kind of price hike right now would come across like the FCC was justified all along in setting policy.'
- "Raising rates based on bandwidth is just another way for ISPs to get around the sticky problem of not being able to charge online companies for faster delivery of their content. If everyone gets treated to the same speed, then the ISP's rationale is to bill customers based on consumption. That's not the same issue as net neutrality, but it does create an unequal playing

I don't expect a lot of price movement on bandwidth use until there's something final on net neutrality. ISPs will hold off on any price increases until after their pending lawsuits are settled with the FCC. Any kind of price hike right now would come across like the FCC was justified all along in setting policy.

> Intellectual Property Attorney Arts & Entertainment Industries

field between people who can afford decent data transfer and those who must limit their usage based on cost." "The ISPs will certainly have more costs as they build out faster networks. People will eventually demand 4K streaming video quality and that kind of ultra-high definition requires a big delivery pipe. This may lead to some consolidation among regional ISPs, but those larger companies might then be able to compete more effectively. Real competition is what's going to control broadband pricing."

5) Online Consumer Survey

Our SurveyMonkey poll of 115 pay-TV or OTT subscribers showed Sling TV gaining minimal adoption, primarily due to lack of awareness of the service. The majority of our respondents that do not have a pay-TV subscription have never had one. Among those that did cancel a pay-TV service, savings ranged from \$0 to \$30 per month. Pay-TV subscribers do not use mobile devices to watch their pay-TV channels. They value pay-TV mostly for easy access to hundreds of channels, including local stations. Although live local TV news channels are the most used source for breaking news, online services dominate consumer use for news overall. One in 10 respondents will subscribe to HBO Now when it becomes available, with one fourth of those respondents very or extremely likely to cancel their pay-TV subscription.

The majority of respondents do not know about Sling TV. Those that do are subscribing to the service for its low cost compared with pay-TV services, because of its inclusion of ESPN, due to unhappiness with pay-TV, and as a replacement for pay-TV. Those that are not going to subscribe to Sling TV cited lack of awareness of the service, the cost, or lack of local channels.

- 60% of respondents do not know what Sling TV is. (02) •
 - 2.6% of respondents have already subscribed to Sling TV, with an additional 0.9% of respondents planning to subscribe to Sling TV in the next six months. (Q2)





- 36.5% of respondents will not be subscribing to Sling TV in the next 6 months. (Q2) 0
- The four respondents that do or will subscribe to Sling TV have done so due to the service being cheaper than pay-TV, ESPN, unhappiness with pay-TV, live news, and being a replacement for pay-TV. (Q3)
 - 52.4% of respondents that do not plan on subscribing to Sling TV have never heard of it. (Q4)
 - 19% of respondents believe that Sling TV is too expensive, and that is why they do not plan on subscribing 0 to Sling TV.
 - 16.7% of respondents believe the lack of local channels as the top reason to not subscribe to Sling TV. 0

Most consumers that do not have a pay-TV service said they never had one. Some that canceled pay-TV saved as much as \$30 per month while others said they saved nothing by eliminating their subscription.

- 57.1% of consumers that do not have a pay-TV service never had one. (Q6)
 - 21.4% of consumers saved \$16-\$30 by cancelling their pay-TV subscription.
 - 14.3% of consumers did not save anything by dropping their pay-TV subscription. 0

9 in 10 respondents subscribe to a Pay-TV service and value its easy access to hundreds of channels as well as local channels. Most pay-TV subscribers do not watch their service on their mobile devices, and those that do only watch about 10% of their TV on a mobile device.

- 87.7% of our respondents subscribe to a pay-TV service in their home. (Q5)
- Pay-TV subscribers believe that having easy access to hundreds of channels (49%), and local channels (16%) would be the hardest things to live without if they cut their pay-TV subscription. (Q7)
 - 59% of pay-TV subscribers do not watch any pay-TV channels on their mobile devices. (Q8)
 - o 20% of pay-TV subscribers do 10% of their viewing of pay-TV channels on mobile devices. (Q8)

More respondents are using an online outlet to get their news over a TV news channel, although live local TV news channels are the most accessed platform for breaking news.

- Live local TV news channels (28.9%), online news sites (20.2%), and national news channels online (19.3%) are the top three primary outlets respondents turn to for breaking news. (Q9)
 - o 56.5% of respondents use an online outlet to get their news, compared with 35.9% of respondents that use TV for their news. (Q9)

Respondents watch local or cable news channels most of the days of the week, but this has slightly decreased in the past year.

- 27.4% of respondents watch local or cable news channels on TV most of the days of the week. (Q10)
- 24.3% of respondents with pay-TV subscriptions have decreased their use of TV as a key source for breaking news over the past year, while 15.2% have increased their use. (Q11)

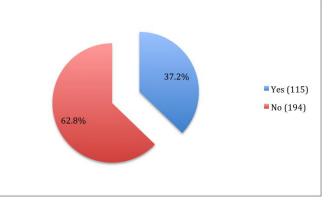
1 in 10 respondents will subscribe to HBO Now when it becomes available, with roughly a fourth of them very or extremely likely to cancel their pay-TV subscription at that time.

- 9.8% of respondents will subscribe to the HBO Now streaming service in the next six months. (Q12)
 - 15.2% of respondents do not know about the HBO Now streaming service. 0
- 27.3% of respondents are very or extremely likely to cancel their pay-TV subscription due to the availability of HBO Now. (Q13)
 - 27.3% of respondents are not at all likely to cancel their pay-TV subscription due to the availability of HBO 0 Now. (013)

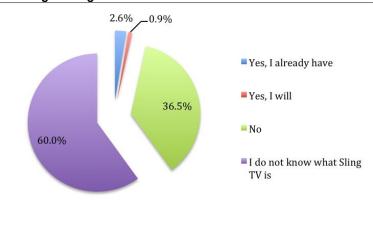


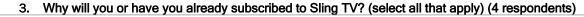


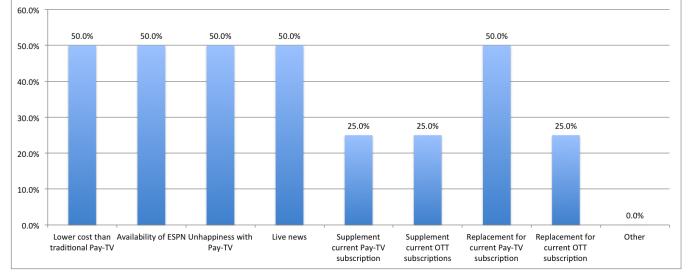
1. Do you subscribe to a Pay-TV or over-the-top television (OTT) streaming service?



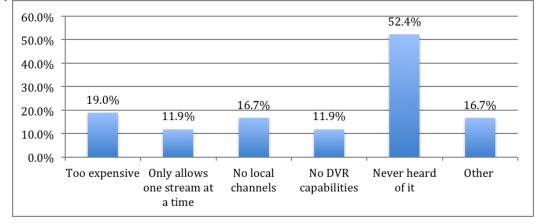
2. Do you plan on subscribing to Sling TV in the next 6 months?





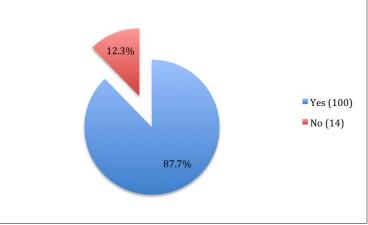




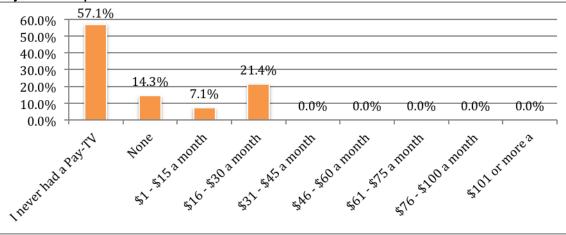


4. Why will you not subscribe to Sling TV? (select all that apply)

5. Do you have a Pay-TV subscription in your home?

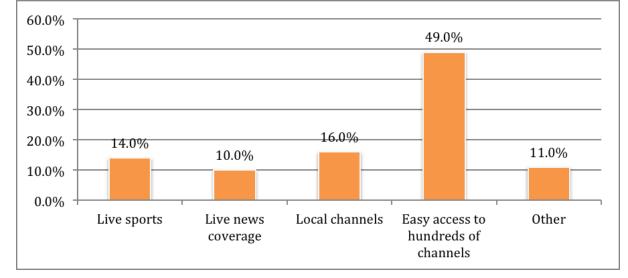


6. How much money did you save, keeping in mind any increases in your Internet bill, when you canceled your Pay-TV subscription?



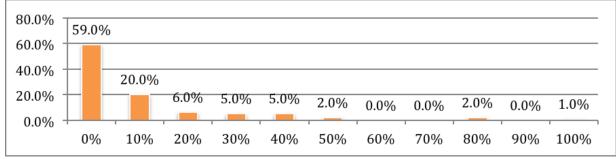


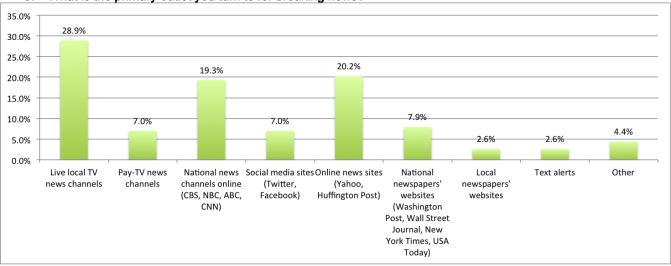




7. What would be the hardest to live without if you cut your Pay-TV service?

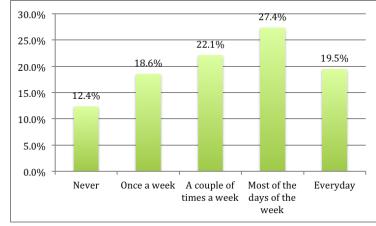
8. What percentage of watching Pay-TV channels do you do on a mobile device?



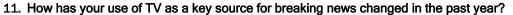


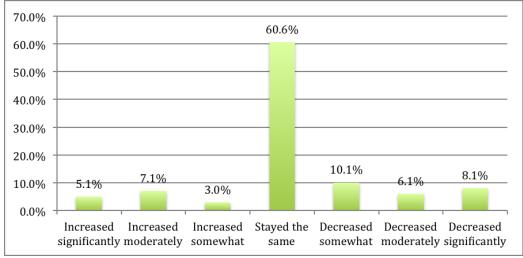
9. What is the primary outlet you turn to for breaking news?



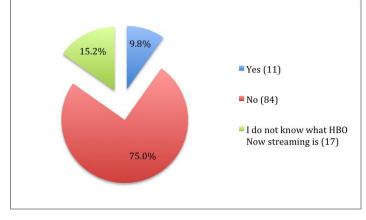


10. How often do you watch local or cable news channels on TV each week?

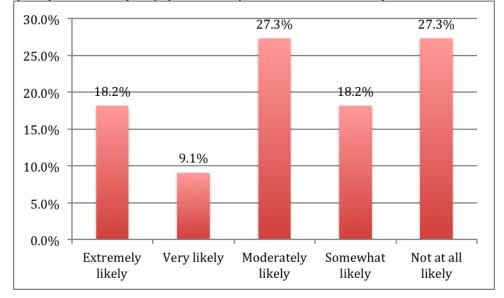




12. In the next six months, do you plan to subscribe to HBO Now streaming service for \$15/month?







13. How likely are you to cancel your pay-TV subscription due to the availability of HBO Now?

Secondary Sources

The following eight sources discuss reviews of Sling TV, speculation about Apple's forthcoming streaming TV service, and millennials' TV watching habits.

<u>Sling TV</u>

Most online reviews speak favorably of Sling TV, including Geek.com's review which compliments most of Sling TV's attributes. The reviewer would not abandon traditional pay-TV due to the limited number of channels the new service offers. User interface and sports options are cited as high points for Sling TV, whereas the inability to DVR or support Apple TV is cited as a low point. One sports columnist experienced several technical hiccups in his Sling TV trial and complained about customer service's initial inability to resolve the issue. CBS's streaming service is outselling Sling TV, according to CBS.

Mar. 16 Geek.com article

A Geek.com columnist gives Sling TV a mostly positive review. Sling's package contains a limited number of channels; however, it includes some of the more popular channels in the pay-TV setting. He likes the interface, audio and video quality, and video-on-demand section. However, he would not give up traditional TV for it.

- "In our <u>initial hands-on</u>, we were impressed with many elements of the service, but found it light on content. Now
 that Sling TV is live, I was given a trial account to live with the service for a few days, using it on a laptop, Android,
 iPad, and streaming it to a TV with a Roku player."
- "For \$20 per month, you get a pretty solid package of channels, which includes the likes of ESPN, HGTV, CNN, Food Network, and Travel Channel. If the <u>full roster of channels</u> isn't enough, another \$5 per month gets you a sports package with ESPNEWS and the SEC network. There's also a kids package that adds Disney Channel and Boomerang. The "news and information" add-on is less compelling, with only four additional channels included."
- The interface is great —the major satellite and cable TV providers can learn a lot from what Sling has put together. It's designed to morph into whatever format you're watching it on. It's touch-friendly on Android and iOS, but also works well if you're using it on a computer (there are separate downloads for <u>Windows</u> or <u>Mac</u>) or of course a television through supported streaming hardware."



ΟΤΤ

- "To connect to your TV, you currently need a Fire TV or Roku -though support is on the way for Xbox and Nexus Player. There's is no mention of Apple TV support; other reports have indicated parent company DISH is unwilling to bend to certain design restrictions for Apple TV apps."
- "I found the video and audio quality to be good, running on a rather fast broadband cable connection. While there is no DVR type of component, you can pause live TV --something my secondary Xfinity boxes can't do. When watching over the Roku, the quality wasn't any different than what my cable service provides."
- "The video-on-demand section is also pretty solid, with many top titles like The Theory of Everything and Fury available for rental. It's not a full-on replacement for something like Netflix, but if you're only a casual movie-watcher, it may be enough so you can check out the occasional title that piques your interest. I rented a couple of films to try it out, and found it to be rather smooth without any hiccups while streaming. It was also convenient to fire up Sling on my computer to select a video, but then watch it later from a connected TV. However, if you crave lots of movies from various genres, you may be a tad disappointed."
- "The diversity of channels that I can get in a traditional TV package is too much for me to give up, so I won't be paying for a subscription after the trial is over. But if I were a cord-cutter, I would definitely get this to have a taste of live TV and access to ESPN."
- "Sling feels like the future of TV: more choice without an obscene price or the ridiculous bartering you have to do with the cable and satellite providers."
- "Commenter simpleas writes: Don't get this if you want to watch hockey. I subscribed and unsubscribed the same day. I just wanted nbcsn. I already got the rest of the games covered with nhl.com."
- "Commenter Bryan Dexter Abaya writes: I have been using it for a little over a month now and it's been great! We love our HGTV, Travel and CNN channels and missed it when we cut the cord. So for \$20, it is great! Plus, it has AMC, so (hopefully) the new season/s of Walking Dead will be available as well."

Feb. 25. 2015 HomeTheaterReview.com review

Sling TV high points include its sports offerings, low cost, easy interface and search function, and low-cost movie rentals. Low points include its limited number of channels, inability to record, limited on-demand movie ordering options, and lack of Apple TV support.

High Points

• "Sling TV provides the live TV experience without the need to rent equipment or sign a long-term contract." • "The inclusion of the ESPN family, TNT, TBS, and Universal Sports is great for sports fan. Sling TV subscribers can also use the Watch ESPN app on other devices."

- · "The cost is very reasonable."
- "The interface is generally easy to navigate, and picture quality is good (depending on network speed)."
- "The Search tool searches across both the channel guide and the on-demand movie listings."
- "HD movie rentals are a little cheaper than they are through Amazon and the iTunes Store."

Low Points

- "The channel offerings are fairly limited right now."
- "Pause/rewind/fast-forward is only available on a few channels, and you can't record anything."

• "You can load the Sling TV app on as many devices as you want, but you can only access the service on one device at a time."

• "You can't order on-demand movies directly from the app using the Roku, Amazon, or iOS platform. Rather, you have to order movies through the computer app, then go to the device to watch it. That's not at all intuitive. Only on Android devices can you directly hit the 'rent' button and watch it immediately."

"Audio is currently limited to stereo."

"Sling TV currently doesn't support Apple TV or Chromecast."

Mar. 18, 2015 Sportsgrid.com article

A sports columnist airs grievances about his experience with Sling TV. Among them are sports channels not working at certain times, lousy customer service and wonky channel surfing. He believes Apple's streaming TV service will outperform Sling TV. A DISH PR rep contacted him after the article was published and successfully resolved his issue.

"Here's a review of Sling TV, the new streaming service from DISH that promises a bundle of quality channels like ESPN, TNT, Cartoon Network and CNN for only \$20 a month: It sucks ass. When I first heard about Sling TV, I was



ecstatic. In fact, I posted a glowing write-up of the app before ever having laid eyes on the thing. Now that I have it on my devices, I feel like a chump. I've been duped."

- "ESPN, ESPN2, TNT and TBS -which usually have live NBA, MLB, tennis, soccer and other sports -rarely, if ever, load at night, during primetime hours. I've yet to watch a single second of NBA basketball on TNT since I bought the service in mid-February. I have gotten ESPN2 to load at around 10 a.m., when 'First Take' is on. Because nobody watches 'First Take,' except for us. I tried to load TNT at about 1 p.m. today on my computer and got my usual error message 'Sorry, we weren't able to authorize playback. Try again and let us know if the problem persists. (code: 3).' This is usually what happens I try to use this service. The only channel I can get to work with any regularity on either my Roku or my computer is HGTV. And I didn't buy this for HGTV. Certainly not for \$20 a month. I assume this is because most people don't use this for HGTV. And too many people trying to watch ESPN or TNT at 10 p.m. ET means that some viewers lose out. I guess."
- "CUSTOMER SERVICE IS TERRIBLE. My very first night that I had Sling TV was February 15, 2015 NBA All-Star Game night, It didn't work. I thought it was something I'd done wrong, I called customer service and talked to a very nervous-sounding man who suggested the following: 'Have you tried turning it off and turning back on again?'... Yep. 'Have you tried uninstalling and reinstalling the app?'... No, but okay, fine. Upon reinstalling, TNT still didn't load. 'Did you use the Roku stick provided with the app?' I had bought three months of Sling TV, stupidly, because the package came with a free Roku stick, and at the time I was using a friend's specifically to watch the game. Somehow, my customer service rep convinced me that I needed the Roku stick that they were sending me. I hung up, and when my Roku stick came in the mail a few days later, I plugged it in, downloaded Sling TV, and fired it up. Same result."
- "Okay, let's try the web. I opened a ticket with their online support system about three weeks ago describing my issue-I haven't heard back yet. I've never seen a representative 'available' online to chat with. Basically, I'm being ignored. I plan on calling customer service again, but I've yet to try a third time, mostly out of frustration. (Because the second time ended with me getting disconnected, Comcast-style, while I was waiting for my call to be answered.)"
- "Using the remote to scroll through channels (most of which, mind you, don't work) is a chore very unlike actually using a TV remote to channel surf. Sometimes the up-down buttons change the channel; sometimes it's the left-right buttons, depending on what screen you're using. There are a few different 'change channel' or 'watch channel now' screens/options that only serve to confuse. It's a mess, basically."
- "Unfortunately, I was stupid enough to pay for three months of this crappy service up front. I hold out little hope of being reimbursed. But because it was only \$60-and it got me a free Roku stick -I'm inclined to forget that I have this problem until roughly every Thursday, when I say, 'I wish I could watch TNT right now!' Their price point is genius: It's low enough to make people throw up their hands and say, forget it, rather than try to actively give a shit."
- "I'm no Apple fanboy, but I'm looking forward to seeing if that company's upcoming TV service-which reportedly includes ESPN, CBS Sports and Fox Sports-works. I still won't get the TNT programming I want, but, shit, I'm not getting that right now either, so this is better than nothing."
- "UPDATE: Sling's PR arm reached out to me and, I must admit, put a lot of work into rectifying my problems with the service. I'm told my issue was not one they'd encountered before, and they would work to figure out what was wrong. In the meantime, I've been given access to a larger Sling package that works, and hey, when it works, it's great (as expected). I still don't think the interface is intuitive, but practice makes perfect. Plus, the fact that you can customize your package by adding bundles (while still paying less than you would for cable) is pretty cool. The jury will be out on Sling until my account gives me quality service on a consistent level, but let's just say I'm not quite as disappointed as before."

Mar. 11, 2015 CNET.com article

CBS' new streaming service, CBS All Access, has more subscribers than DISH's Sling TV.

- "CBS All Access, CBS' \$5.99-per-month online streaming service, has more subscribers than the 100.000 people who have signed up for DISH Network's Sling TV, CBS CEO Les Moonves said Wednesday."
- "I'm not going to give away our subs,' he said in Palm Beach, Fla., when asked about Sling TV's 100,000 trial users in the first month of that service. 'It's more than that number, I will tell you that,' he said."
- "CBS All Access kicked off in 14 US television markets in October. Sling TV, a multichannel online offering from satellite provider DISH, launched nationwide in February. CBS All Access launched in October, providing thousands of episodes on demand of current shows, their previous seasons and classic shows, as well as the ability to stream





local CBS stations live in 14 of the largest US markets, though the service lacks NFL broadcasts. On Wednesday, Moonves said that the company is 'very excited to roll it out to the rest of the country' in the next few months."

"DISH's Sling TV launched last month, a first-of-its-kind multichannel live TV service solely online. Its basic subscription of 16 channels like ESPN, AMC, Disney Channel, TNT and HGTV is \$20 a month, and consumers can buy add-on packages providing extra channels for sports or kids programming. The company offers a one-week free trial."

Apple Streaming TV

Many rumors are circulating about Apple's new streaming TV service, including price points, potential stand-offs with cable companies, sharing customer data and television hardware development. Apple TV will include major networks like ABC, FOX, and CBS, but due to a dispute with Comcast will not include any NBC programming.

Mar. 22 2015 CheatSheet.com article

Apple will market its streaming TV service heavily, and likely will be priced between \$20 and \$40 per month. If Apple streaming TV captures 10% of the U.S. market, the company will generate \$4 billion in service revenue. Cable companies might try to hinder the success of Apple streaming TV. Apple will share its customer data with programmers as an incentive to get them onboard with its streaming service. A Piper Jaffray analyst believes Apple is developing television hardware.

- "Apple has held talks with a number of television groups to offer an Internet-based TV service for the iPhone, iPad, and Apple TV set-top box, according to The New York Times, which cites people familiar with the company's plans. The service, which could be announced later this year, would offer a bundle of channels that would be smaller and cheaper than the offerings of a typical cable subscription."
- "One source told the Times that Apple will heavily market its streaming service, which the company has reportedly pitched to networks as 'better than the best-of-class cable products.' The service could include on-demand functionality and the ability to stream live and on-demand TV to a variety of devices. Along with the channel lineup, pricing details remain unclear. One source said the subscription would likely cost between \$20 and \$25, while another said it would be in the range of \$30. Some media executives told the Wall Street Journal that they believed Apple is aiming to price the service between \$30 to \$40 a month. The final price will likely depend on negotiations with the television groups. Apple is reportedly aiming to announce the service in June and launch it in September."
- "According to Business Insider, a Baird Equity Research note posits that if Apple's subscription service could reach 10% of U.S. broadband households, it could generate \$4 billion of annual service revenue, though we suspect the penetration could go much higher, with a significant global opportunity as well. Globally, Apple could eventually generate \$30 billion of annual revenue if the service can capture 10% of the approximately 90 million broadband households."
- "Apple could run into resistance from cable companies who don't take kindly to its subscription service's ability to replace a traditional cable TV package. BGR posits that cable providers 'have a lot of tricks up their sleeves' to slow down Apple and any other companies building online streaming services. According to Brad Reed, they could try to keep Apple from acquiring exclusive or preferred rights in order to eliminate the risk that they'd face a more dangerous rival than Netflix. Reed thinks that cable companies could also try to implement a data cap system for home Internet services (though it's unlikely that they'd succeed in doing so), so that they can charge users extra fees and charge content providers to 'sponsor' their data so that it doesn't count against the cap. Another tactic the companies could take is to raise broadband prices if too many people cut the cord and get rid of their cable TV subscriptions."
- "According to The New York Post, Apple is offering to share data with programming partners to get them on board with its subscription service. The company is reportedly willing to share details on who its viewers are, what they watch, and when they watch. That kind of information could help programmers better target shows to viewers and advertisers. Additionally, Apple is said to be taking an unusually 'hands-off' approach with programmers, and will, for instance, let them decide whether they want to air ads."
- "Lara O'Reilly says that the [Apple subscription TV service] has the potential to be 'the shot in the arm' to reinvigorate Apple's mostly-dormant iAd business, O'Reilly says if Apple were to pair iAd with Apple TV, the results could be transformative for the ad industry. Such a pairing would enable advertisers to leverage the linking of the targeted, measurable world of online advertising with the reach and scale of television."



"The Verge reports that Gene Munster has linked the rumors about Apple's subscription TV service to actual television hardware. The Piper Jaffray analyst has repeatedly predicted that Apple will release a smart television set, each time saying he expects it to hit the market the following year. But as The Verge points out, the company does not seem to have made any moves into the television hardware business, and there are no indications from the "notoriously leaky" supply chain to support Munster's claims. And it's become a repeated occurrence on Apple's quarterly investor calls for chief executive Tim Cook to chuckle as Munster asks his infamous question about the hypothetical Apple TV set."

Mar. 16, 2015 The Verge article

Apple's online TV service will include broadcasters such as ABC, CBS, Viacom, Discovery and Fox; however it will most likely not include NBC due to a dispute with Comcast. Apple recently secured exclusive rights to HBO's over-the-top streaming service for three months.

- "Apple's long-rumored online TV service could be announced as soon as June, according to The Wall Street Journal. The company is reportedly preparing to offer a service with around 25 channels from broadcasters like ABC, CBS, Viacom, Discovery, and Fox and launch it this September across all iOS devices and the Apple TV. The bundle could include the likes of ESPN and FX, and Apple is said to be pushing for a large on-demand library, but it will likely leave out a lot of smaller networks. Recode said last month that Apple was in talks with broadcasters to offer bundles of content."
- "But although the WSJ reported a year ago that Apple was teaming up with Comcast on a set-top box that would take advantage of priority internet traffic, talks between the two have broken down, meaning that the service at present won't include channels from Comcast-owned NBCUniversal. The WSJ's sources say Apple decided that Comcast was 'stringing it along' while diverting effort to develop its own X1 box."
- "Last week Apple scored a major media deal when it secured exclusive rights to HBO's over-the-top streaming service for three months, and it also dropped the price of the Apple TV to \$69. Rumors of a TV service, a new set-top box, or an entirely new TV itself have been floated for many years; 2015 could be the year that Apple starts to get a grip on the tangled TV industry."

Millennials' TV Watching Habits

U.S. and Canadian millennials will spend \$62 billion on media content in 2015, equating to \$750 per millennial. Only 46% of millennials watch linear TV each month. Millennials watch live TV significantly less than Gen Xers and Younger Boomers, and watch significantly more TV programming online.

Jan. 2015 Deloitte Touche Tohmatsu Ltd. white paper

U.S. and Canadian millennials will spend over \$62 billion on media content in 2015, which equates to \$750 per millennial. Almost half will be allocated to traditional pay-TV. Two-thirds of millennials living away from home will pay for traditional TV. About \$40 of the \$750 will be allocated to streaming video services such as Netflix or Hulu.

- "Deloitte predicts that US and Canadian millennials will spend over \$62 billion on media content in 2015. This is greater than the total spend on Internet advertising in the US and Canada and as such represents a significant contribution to the media sector from the generation of 18-34 year-olds often accused of defaulting to unpaid sources of content. There are 83 million millennials in the US and Canada, and \$62 billion of spending on media content equates to \$750 each."
- "The reality is that millennials are spending less on traditional media than they did in the past, and less than older generations, but they are still spending. The biggest media expenditure for most households in the US and Canada is pay-TV. This is also true for millennials, almost half of whose annual media spending (\$316 of the expected \$750 total) is on traditional pay-TV. About 70 percent of 18-34 year-olds live away from the parental home, and 80 percent of those are in a household that will pay for TV in 2015, with each subscription shared by 1.7 people who are 18+, for an estimated \$316 spend on TV. About four-fifths of all 18-34 year-olds have access to pay-TV bundles, at an average cost of \$80 per month"



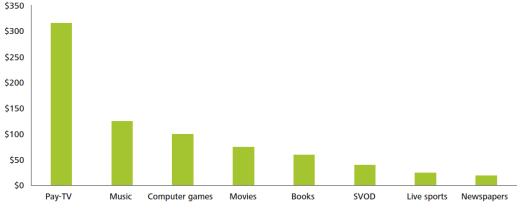


Figure 1. Millennials' \$750 spend on media content in 2015

Source: Deloitte, 2014, based on multiple sources

- "Streaming video on demand services (SVOD) will likely add another \$40 in 2015. In both the US and Canada, SVOD services such as Netflix are used by 43 and 35 percent of 18-34 year-olds respectively. At \$9-\$10 per month per service, this suggests an average expenditure of at least \$40."
- "We expect pay-TV to be the largest segment of spend, as in the US and Canada, at about \$100 annually. Spend however is highly variable. Japan is the third-largest pay-TV market in the world, but at \$8 billion in 2013, it is less than a tenth of spend in US and Canada of almost \$90 billion.[234] Pay-TV spend in the U.K. is higher than the rest of Europe, but penetration at 57 percent and spend per month about \$60 are both lower than in the US and Canada."
- "18-34 year-olds watch over 24 hours of television per week in the US, and 17 hours in Canada. Both figures are lower than the national averages for all viewers 18+; but millennials represent an attractive demographic, and represent billions of dollars of the nearly \$75 billion North American TV advertising."

Jan. 29, 2015 adweek.com article

Only 46% of millennials watch linear TV per month and 40% watch live TV per month, compared to 52% of Gen Xers and Younger Boomers. One-third of millennials watch four or more hours of TV online per week, whereas just 12% of Gen Xers and Younger Boomers watch TV online.

- "Forester Research last week published the findings of a new survey-Making Sense Of New Video Consumption Behavior-which showed that only 46% of US online millennials, Gen Xers, and Younger Boomers watch linear TV monthly."
- "The greatest difference in the video consumption habits of Gen Xers and Younger Boomers (35 to 58) versus millennials (18 to 34) is when it comes to watching live TV broadcasts. 52% of Gen Xers and Younger Boomers view live TV in a typical month, while only 40% of millennials do the same. On the flip side, 40% of millennials stream video from a paid online video service in a typical month, while only 30% of Gen Xers and Younger Boomers do."
- "As for how-and how much-viewers are consuming content, 55% of millennials watch four or more hours of TV on a TV, and 34% of millennials watch four or more hours of TV online; compare this to Gen Xers and Younger Boomers, where 73% watch four or more hours of TV on a TV, and only 12% watch four or more hours of TV online. Still, the main nugget of the report that the media (us included) are latching on to is that only 46% of millennials are watching linear TV monthly."

Additional research by Emily Carr, Steve Evans and Mason Rudy.



The Author(s) of this research report certify that all of the views expressed in the report accurately reflect their personal views about any and all of the subject securities and that no part of the Author(s) compensation was, is or will be, directly or indirectly, related to the specific recommendations or views in this report. The Author does not own securities in any of the aforementioned companies.

OTA Financial Group LP has a membership interest in Blueshift Research LLC. OTA LLC, an SEC registered broker dealer subsidiary of OTA Financial Group LP, has both market making and proprietary trading operations on several exchanges and alternative trading systems. The affiliated companies of the OTA Financial Group LP, including OTA LLC, its principals, employees or clients may have an interest in the securities discussed herein, in securities of other issuers in other industries, may provide bids and offers of the subject companies and may act as principal in connection with such transactions. Craig Gordon, the founder of Blueshift, has an investment in OTA Financial Group LP.

© 2015 Blueshift Research LLC. All rights reserved. This transmission was produced for the exclusive use of Blueshift Research LLC, and may not be reproduced or relied upon, in whole or in part, without Blueshift's written consent. The information herein is not intended to be a complete analysis of every material fact in respect to any company or industry discussed. Blueshift Research is a trademark owned by Blueshift Research LLC.

