

Comcast to Benefit from OTT Growth, Netflix Still a Leader

Companies: AAPL, AMZN, ASCMA, BBY, CBS, CMCSA, CNK, DIS, DTV, GOOG, LINTA, NFLX, NWSA, RGC, ROVI, T, TWX, VZ, WMT

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Research Question:

As the evolution toward OTT content continues, who will be the winners and losers among traditional MSOs, OTT content providers and content creators?

Summary of Findings

- Cable companies are well-positioned as <u>over-the-top</u> (OTT) viewing continues to increase. They have strong content delivery networks and a business model that supports content creation.
- <u>Comcast Corp.</u> (CMCSA) is in the best position with its expanding OTT services, ownership of content through <u>NBC</u>, and 22.8 million subscribers.
- Netflix Inc. (NFLX) is the clear OTT service leader with the best content delivery system. <u>Amazon.com Inc.</u> (AMZN) and <u>Apple Inc.</u> (AAPL) also were discussed as potential OTT winners.
- Content providers will benefit from increased OTT and mobile TV viewing. Content licensing values are up, and producers now have more outlets for their content.
- The lack of aggregation and curation services is a barrier to OTT growth. <u>Redux.com</u>, <u>VHX.TV</u> and <u>Rovi Corp.</u> (ROVI) provide interesting solutions.
- Opportunities also exist for support service companies, such as <u>Ascent Capital Group Inc</u>. (ASCMA), that assist content providers in making their products OTT-ready.

	Cable Cos. Still Leaders	Netflix Leading OTT Provider	Content Licensing Value Up
Cable Operators		N/A	1
Distributors		\rightarrow	1
Content Creators	\rightarrow		1
Industry Specialists		\rightarrow	
Cable and OTT Customers	→	\rightarrow	N/A

Silo Summaries

1) CABLE OPERATORS

Both sources think cable will continue to be a leading provider of video services. The movement toward IPTV (Internet protocol TV) is underway, and the cable pipeline has great value. Smart TV should be available in the first quarter of 2011 and will aid cable companies in providing OTT services. Negotiations for licensing content for TV on mobile devices is in progress, and the cable operators view this service as "low hanging fruit." One source expects cable operators to recapture the premium content market.

2) DISTRIBUTORS

Both sources expect OTT to continue to grow, aided in part by the introduction of smart TV. Content streaming rights are becoming more valuable, and costs are expected to escalate as cable operators and OTT providers eventually will need to renegotiate licenses. Aggregation and curator services are important to the success of OTT. Leading providers are Redux.com and VHX.TV. Netflix is viewed as the unchallenged OTT leader by one source, but is expected to see slower growth according our second source. Amazon offers top-level OTT service while Vudu, with Wal-Mart's backing, is poised to explode in the space. Even with OTT's anticipated growth, these sources do not expect OTT to dramatically disrupt cable providers' positions in content delivery.

3) CONTENT CREATORS

These two sources differed in their thoughts about the future of cable operators. One said the ever-increasing value of streaming rights for content will disrupt the cable-subscription model. The other source said cable companies are shifting to Internet, VOD, cable, apps and search services. Netflix is considered a leader in OTT services. The lack of a simple user interface and quality aggregation and curation services is considered a barrier to the growth of OTT.

4) INDUSTRY SPECIALISTS

Two of these three sources said Netflix has the advantage in the OTT industry. Existing distribution services have a solid advantage in the current market although they may look a lot different in the future. One source expects the existing model of creating, distributing and viewing movie content to remain intact. Cable companies have the advantage of existing distribution networks and a subscription-based business model to support content production. OTT will have to negotiate with cable companies to deliver services, and that alone gives cable firms leverage.

5) CABLE AND OTT CUSTOMERS

These four sources were split by generation in their decision to keep or cut cable services. The two 30-somethings have considered cutting or shaving, and both would stop service completely if they could. The two remaining sources are in their 50s or 60s, and are comfortable with keeping their cable.



Background

In recent months, Blueshift has covered and observed trends in the OTT, video-on-demand (VOD), and the movie theater market. Blueshift's March OTT report confirmed previous reports stating that cable cutting is not significant but that premium channels are losing subscribers. Our April Premium VOD report found that studios believe consumers would pay \$30 for the ability to see a movie in their homes six to eight weeks after it premieres in theaters, but experts and moviegoers said the limit was closer to \$6 to \$10. Cable and satellite companies were seen as beneficiaries of premium VOD and theaters as the losers.

CURRENT RESEARCH

In this next study, Blueshift will interconnect the movie, TV and cable industries and determine the winners and losers among content creators, traditional multiple system operators (MSOs), and OTT content distributors. Blueshift employed its pattern mining approach to establish and interview sources in seven independent silos:

- 1) Cable/satellite operators (2)
- 2) OTT hardware and software distributors (2)
- 3) Content creators (2)
- 4) Industry specialists (3)
- 5) Cable and OTT customers (4)
- 6) Movie theater chain (1)
- 7) Secondary sources (4)

Blueshift interviewed 14 primary sources, including three repeat sources, and included four of the most relevant secondary sources focused on the entertainment, TV and OTT industries.

Silos

1) CABLE OPERATORS

Both sources think cable will continue to be a leading provider of video services. The movement toward IPTV (Internet protocol TV) is underway, and the cable pipeline has great value. Smart TV should be available in the first quarter of 2011 and will aid cable companies in providing OTT services. These two sources' companies are involved in providing TV services to mobile devices. Negotiations for licensing content for TV on mobile devices is in progress, and the cable operators view this service as "low hanging fruit." One source expects cable operators to recapture the premium content market. The second source said content providers are not about to risk the \$6 billion (\$35 billion for the total industry) in fees they get from his cable company by offering exclusive content rights to other companies.

> Cable veteran and former executive for a CE manufacturer

This source, who also has worked on developing new cable technologies, said operators are aggressively pushing content onto tablets because Apple's iPad is the "low hanging fruit." Cable operators are fighting for the ability to secure rights outside the home, particularly as tablets become more capable of outputting video. Cable user interfaces will improve as cable moves to the cloud and delivery moves to IP. This source is optimistic about the growth of 3-D content and 3-D TV viewership.

- "I think the operators are well-positioned to be able to take advantage of the new market with tablets and portable media devices. I think they are taking an aggressively innovative approach. They're looking aggressively at this market. I think it will evolve. Initially, it'll start out as these tablets, created as a portable TV in the home. You're in your home using your home subscription. Where it's immature is, what happens when you take your tablet in your car and go to
- Starbucks? Can you still watch? That model is a bit new. There's still a scramble for business approaches to it." "Certainly, the wireless providers have a great opportunity there, but it's a new opportunity where they haven't traditionally provided content. Some would argue that cable's agreements are restricted and they may have to

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> Cable Veteran & Former Executive **CE Manufacturer**

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negotiate new contracts. There are issues like blackouts for sports. How do you enforce those? Those are based on off-air FCC transmission that's regional. If you're in the region, you've got a blackout, but if you're outside it, you can watch. It's a challenge to work out. There are other content rights that aren't fully resolved."

- "Many of the services are focused on the iPad because of the numbers. If there are a lot of people who have tablets and there are multiple device types, it gets harder to regulate. iPad doesn't have a lot of internal storage. ... It's a consumption device. As innovative devices hit the market, some will have network outputs, HDMI outputs; some can retransmit. And now you have rights challenges and cable ops have to enforce. It's challenging. You start with low-hanging fruit like the iPad."
- "The technology that the cable operators are asking for, and we're developing will allow cable ops to make innovative delivery options available and recapture the premium content market. One of the complaints has been that it's hard to find content on an set-top box. It's a long-term complaint. There's a mind shift toward a cloud-based implementation approach. They're implementing it in Atlanta. It means the operator can makes changes rapidly and add new features and customize the experience based on user experience. That's a big win for the cable industry. The navigation has always been limited by an app running on the set-top box and because there are new set-top boxes every year; it's been hard to roll out new apps that have to work on new boxes. With the cloud, implementation can be done on the network side. That'll make a big difference for cable at the home."
- "The technology is ready for IPTV, but what hasn't been worked out is the details of navigation and some of the rights issues. Some of the operators are partnering with CE manufacturers to give cable services on smart TVs. You'll see in their suite in the IPTV space, cable services as an option. ... I've seen several IPTVs, and it's a bit clunky to find things and jump around. That's an area where the cable operator can provide a great advantage."
- "I think all the players have challenges. They all need to make adjustments. It's hard to say if the advantages are on cable ops, programmers or CE. It's a grab bag at this point."
- "The trend is to move EPGs [entertainment programming guides] away from a dedicated app on a client device. That's an old model that has to evolve and make it change faster. Using HTML5 is the way cloud-based solutions will evolve. The main advantage of the cloud is the shortness of the development cycle and the ability to change a user preference. Today, if a service has been launched and it takes a long time to roll out, you discover based on feedback that things worked better another way. Now you go back to the software and have to implement a new version of that software. OCAP [OpenCable Application Platform] created a common platform, but it doesn't solve all the problems of the rapid development cycle. With the cloud-based system, you can overnight instantly roll out a new user interface. You can fix things once for everyone. You can improve things. As a general business trend, you want development in-house."
- "There's a theory that all new product introductions follow a similar hype curve in how high it reaches in terms of publicity and newsworthiness. 3-D peaked in January or February of 2010. It peaks when a product is first introduced and then enters a decayed period when it's old news and there's not a market that is substantially developed. Until the product begins to grow in market share, we won't hear more. If it succeeds, it has a steady climb in newsworthiness that's more gradual than the rapid initial acceleration. I was plotting it in November/December, and it was at the bottom of the 'trough of disillusionment.' It's starting to climb out of the trough. I think that's a good sign. It may succeed. It's not out of the woods. It's a gradual climb. I'm optimistic. There're more products at retail. There weren't good ways to demo in the stores. Two out of three times there's a problem with the demo. It's a hard thing to demo. Then there's the whole area right now in confusion about eyeglasses. There are new products being hyped with free glasses."

Content production is happening. It's not as rapid as it was. There's a substantial content. One amount of operator said he had 1,000 hours of content and had three 24/7 channels. 3-D implementation is faster than HD was at this point.

> Cable Veteran & Former Executive CE Manufacturer

- "Content production is happening. It's not as rapid as it was. There's a substantial amount of content. One operator said he had 1,000 hours of content and had three 24/7 channels. 3-D implementation is faster than HD was at this point."
- "There are several things playing out in the softening of theatrical 3-D. Some of it may be the realization that 3-D TVs are available. They're getting into the buying decision about \$60 at the theater versus a Blu-ray 3-D. A lot of the summer movies have been conversions. The live-action simulated has not been at the professional level. It's





hurried up, and there have been shortcuts. All 3-D is not created equal. Some are worth the cost, some aren't. Consumers are discriminating. The premium has to be commensurate to the quality of the film. Consumers won't make the mistake several times."

"We were showing the aggressive migration from OCAP to all IP kinds of offerings at the cable show in Chicago. These were standards-based and already in the market. It got a lot of attention, particularly from the FCC regulatory folks. I think that there was some direct correlation between what regulators saw and their decision to pull back on AllVid, because what we showed them the marketplace was working. Time Warner, Comcast, Cox [Enterprises Inc.] are all moving ahead with content available on any device. AllVid was part of the national broadband plan."

Executive for a leading cable operator: repeat source

This source is focused on getting content onto tablets and will begin its smart TV plan in 2012. Delivering content out of the home remains a rights conflict with programmers. New connect rates are closely tied to occupancy rates, which remain stagnant. The largest challenge for the operator is the cost of content, which now must be delivered wherever and whenever the customer wants it. Premium VOD still is being worked through and is not vet launched.

- "We already have tablet content in the home. We are up to 86 channels, and then we're up to a hundred as of last night. We started with the iPad app and moved to Droid and iPhone. It all has to be changed for form factor.'
- "In terms of smart TV in the home, probably we're talking first quarter next year. The programming right now is geared toward tablet. In-home stuff is in process. We started with the iPad. Last night's release gives you DVR remote function. We'll do all the same on Droids, iPhone, [Sony Corp.'s/TYO:6758/SNE] PS3s. Samsung [Electronics Co. Ltd.'s/SE0:005930] Smart TV is at the back end of the core in the first guarter of 2011. That's all in the home."
- "Out of the home is a rights issue. Out of the home is just ESPN [The Walt Disney Co./DIS and The Hearst Corp.] now. [Time Warner's] HBO GO is probably next. We're working through rights. As we get rights, we'll make things available. Out of the home is still through a Web portal, not just an iPad app. It has to authenticate. ESPN is accessed through a Web-based server. You set up an IDM [identity management] password. We're in development for one portal for all stations."
- "Connection rates have to do with occupied housing, and that hasn't changed very much in our markets. There's stuff in economic reports that rentals are up, but we're waiting for market-by-market data. We don't know if rentals are up in place of home ownership, which would hurt subscribership. You need the sum of rental and ownership to be up to get new customers."
- "We're still working through premium VOD. We're not launched yet."
- "We see the world moving toward IPTV. We've talked about making our products more flexible for consumers, maybe reduce dependency on set-top boxes and be more flexible so we can innovate. I don't know how long it will take. It depends on TV adoptions. We launch smart TV apps next year with streaming."
- "\$6 billion is an awful lot of money for the programmers to give up. If they start offering exclusive rights to streaming, they'll get less money from us. You saw that with Epix [Viacom Inc./VIA, MGM and Lionsgate Entertainment Corp./LGE]. We've been out of contract with [Liberty

\$6 billion is an awful lot of money for the programmers to give up. If they start offering exclusive rights to streaming, they'll get less money from us.

Executive, Leading Cable Operator

Media Corp.'s/LINTA] Starz because of their deal with Netflix. Because we're so important in that ecosystem, it makes us important. Whatever they do, they know it impacts what we pay. A lot of our program rights, we've tried to negotiate in protection."

- "On content, the greatest challenge is the cost. The content providers continue to want more and more money. If we can create compelling products that give customers control over where they want it and when, they'll continue to pay for the product. Then we can maintain the ecosystem and make our fair profits. That's the greatest challenge ... controlling the costs and having the right products in customers hands. The value of our pipe is why we can do that."
- "Fiber to the home ... I don't agree it's dead ... but it's not economical to expand to the whole U.S. Without a good pipe, you can't expand. The density of our pipe positions us well to play."





2) OTT HARDWARE AND SOFTWARE DISTRIBUTORS

Both sources expect OTT to continue to grow, aided in part by the introduction of smart TV. Content streaming rights are becoming more valuable, and costs are expected to escalate as cable operators and OTT providers eventually will need to renegotiate licenses. Aggregation and curator services are important to the success of OTT. Leading providers are Redux.com and VHX.TV. Netflix is viewed as the unchallenged OTT leader by one source, but is expected to see slower growth according our second source. Amazon offers top-level OTT service while Vudu, with Wal-Mart's backing, is poised to explode in the space. Even with OTT's anticipated growth, these sources do not expect OTT to dramatically disrupt cable providers' positions in content delivery.

Executive from an OTT company; repeat source >

Netflix remains the unchallenged OTT leader, with strong prospects for foreign expansion. The source questioned whether Latin America has enough bandwidth to accommodate Netflix, and said European nations are quickly filling the OTT space with region-specific services. Netflix's size guarantees its place as a key player, and loss of content would have limited effect. App offerings will continue to grow, along with the production of new content specific to the Web/OTT. Missing from the OTT landscape and urgently needed is an aggregator with editorial authority. Redux.com and VHX.TV are promising examples of a curator solution. New services from Amazon and HBO2GO are impressive while Best Buy is further behind. Backed by Wal-mart, Vudu could make a big splash before 2012. Cord shaving of cable services exists, but complete cord cutting seems in limbo.

- "Netflix continues to have a strong value proposition in the U.S. People love their buffet of offerings. You sign up, pay them and there's always something to watch. They are nice from a market standpoint because they can go into any area with a strong value proposition and brand name, better than Roku [Inc.] or others."
- "Netflix definitely has more room to grow. If you look at the 23 million subscribers and the number of devices, the number of people streaming continues to increase. My understanding is that the number of people streaming is now greater than the number of people watching DVDs."
- "Netflix has excellent prospects for expanding into foreign markets. There's only one problem in Latin America, and that is broadband penetration and broadband speed. I don't know how much exists in Latin America. My guess is that the studios will be willing to license them 20 to 30 programs at a time, whereas in Europe, the licensing is more difficult."
- "I recently read a report or an article that said there were more broadcast shows produced for TV this season than in recent years because they are banking on higher revenue from Netflix to pay to stream and that they believe they will get more from Netflix than they would from reruns. If it is true, that's a win-win for the content providers and Netflix."
- "I don't think Netflix cares about losing specific content. If something disappears from their offerings, there is always something else to take its place. Given their large buffet of programs, if two to three shows disappear, it's no big deal. It's all geared to a specific type of consumer. There are people who couldn't care less if they catch a specific program live. But others are passionate about certain shows ... they have to catch live because they have to interact to vote or comment. ... Market-wise, they are doing well based on the addition of certain shows that you could get on cable."
- "My guess on [Netflix's] licensing battle is that Sony was holding out to further its own VOD service, Qriocity, more than anything."
- "HBO has done a great job of building up an excellent experience/experiment with HBO GO to existing subscribers. I am surprised by HBO VOD and the ability to get access to content, no matter where you are. That will help when they launch their own service. I'm now sure it will be anytime soon but now they have an experimental proposition to counter Google TV."

I would say Amazon has the top service out there; then Vudu and then CinemaNow.

Executive, OTT Company

- "We don't have Best Buy's CinemaNow on our platform. Amazon VOD is now included with Amazon online. It makes for an interesting service for Amazon, and it's an interesting play. With CinemaNow, it's really up to Best Buy to get it on the device so they can build a profitable business off of that. It's a retail play. I would say Amazon has the top service out there; then Vudu and then CinemaNow."
- "I have not seen a dramatic shift quantitatively in people cutting the cord, but we hear about it anecdotally. The last time we surveyed our customers, 50% had cable and 50% did not. There are different categories of users."



- "Are there cable 'never-getters'? I think so. There's one guy here in our office who only has cable so he can get baseball games, but among the interns [younger viewers], almost nobody has cable. Those kids know how to get what they want on the Internet, whether it's legal or illegal. ... They see [visual] entertainment in the same way they see music: They think it should be free."
- "The cable companies hold all the cards. They have the subscribers, the billing and the content. It's their game to lose. Does it make sense to pay \$80 a month so you can watch HBO? They are protecting the old model, and in doing so they may be missing some new business that is offered through a different model. I think what Time Warner is doing with TV Everywhere is starting to push the limits and trying to get stuff out there. It will be interesting to see what happens and what they do next in the coming years."
- "The biggest growth opportunity is in 'content discovery.' That service does not yet exist, and it is needed in a big way for OTT. There are interesting developments in this area. There is Redux.com, a crowd-sourcing channel. ... Then there is the human and editing element because you can share it with your friends or with people who have the same interests. ... There is also a way to mix things together. If

you think about how we watch 30- to 60-minute shows, in each episode there is a story flow and over time there is a story flow in the show as it spans the season. Now you can work with different content on the Web to do something similar. It is curated by humans, but it using a unique platform to do so. Another one is VHX.TV. It's a bookmark service for video on the Web, and it plays with an interface that is similar to TV, with pop-up controls. You can see what your friends have bookmarked or create a new bookmark. The people there who are curating the video really have their finger on the pulse of what is out there and worthwhile on the Web. As we get further into the OTT space, we will see more services like this. They essentially are playing the role of the traditional network and curating and crafting what is on the web but making it available all in the same place."

- "Vudu does not have a lot of name recognition, but it may be poised to explode through its relationship with Wal-Mart. Wal-Mart acquired it in the third quarter of last year, so they are going through reorganization but my guess is that Wal-Mart will come out with it in a big way soon."
- "We see services similar to Netflix in Europe. Some have aspirations to branch out, and others are more focused on their specific region. In Scandinavia there is <u>Headweb [AB]</u>, which was nominated for a Best in VOD award. <u>Blinkbox</u> is a service owned by Tesco [PLC/LON:TSCO] in the UK. There is some concern about [Netflix's] market share, but the holes for a VOD service for subscribers are quickly being filled."
- "Are streaming rights valuable enough to disrupt cable? ... I don't think we are there yet, but we will get there. Netflix now in the U.S. is one of the largest MSOs. They have a long way to go to surpass the number of cable viewer, but I think they are working their way up there."
- "We are starting to see more content for OTT. It's starting to happen, but it's not the norm. Some have gone out and created two to three shows and then licensed them to a channel. ... I think we will start to see more of it because the distribution for the Internet is way more attractive."
- "I think we will see more apps. The app is an easy paradigm aimed at the iPhone and Android, but now we can
 take it to the next level and they will continue to grow with the move to smart TVs."
- "A lot of consumers are now hesitant to run out and buy new media. ... There's a lot of confusion now for consumers. At the end of the day, they are more willing to sign up for Netflix than with Vudu because they are worried about whether they will be able to watch specific shows."
- "The personal experience of watching cinema in a theater will not be diminished. We will just see more options for watching at home. 3-D was a gimmick that helped drive movie sales, and you cannot get the same experience through home entertainment. ... Great movies will continue to do well in theaters."

The biggest growth opportunity is in 'content discovery.' That service does not yet exist, and it is needed in a big way for OTT. There are interesting developments in this area. There is Redux.com, a crowdsourcing channel. Are streaming rights valuable enough to disrupt cable? ... I don't think we are there yet, but we will get there. Netflix now in the U.S. is one of the largest MSOs. They have a long way to go to surpass the number of cable viewer, but I think they are working their way up there.

Executive, OTT Company



Dan Weiner, Vice President of Marketing & Products, Thought Equity Motion

Streaming rights continue to increase in value but are not a threat to cable subs. As the app market expands in concert with device sales, this source expects increasing tension between content creators and OTT/VOD distributors over licensing fees. The market for new OTT content is growing, including Michael Eisner's Vuguru.com and digitization/distribution of footage/movie assets that have not been released previously. The data cap issue looms, and cable/broadcast operators could even go to regulators to force fee hikes for higher usage. As OTT services grow, battles will take place over VOD fees, licensing fees and limits on rights for streaming. Netflix's size and customer connections make it a necessity, but its pace of growth would slow as the OTT space matures.

- "We are a video host with a cloud-storage platform. We hand-master video/film assets and license. ... We also can deliver the assets to Netflix, and that enables them to monetize. We do not own the asset, but it adds to our licensing side of the business. We are the technology service and licensor. ... Content is the last part of what we do. In the OTT value chain, we are one step back. ... We have lowered the bar and cost so that companies like [Viacom's] Paramount can digitize assets, make them more available and benefit from a new revenue stream."
- "Our competition is not Netflix or Hulu [LLC]. We compete with Ascent and others in the digitizing peer group space."
- "When we have worked with movie studios and others, they do acknowledge that OTT is growing and with that space growing they say they need more of a digital library ready for OTT and streaming. We do it at scale and more economically so they can see a ROI."
- "Streaming rights are finally becoming more valuable. Before, there was more speculation over what you could stream. Then Hulu and Netflix came along and grew to the point of making it valuable. Are the streaming rights valuable enough to disrupt the cable subscription model? They are not quite that valuable. If HBO starts to see some value or Sony invests more money on the streaming side, people will pay more attention. But it is still dwarfed by the cable channels. That's why everyone is trying to figure out the timing and strike a balance. Netflix created a direct to consumer connection, and that's where the relationship is. Netflix is big enough now to make demands. Others are trying to figure out how to survive as they emerge."
- "Everyone is doing some kind of app, like we see with HBO2GO. But at this time they also don't want to anger the cable companies. ... Right now it's in test mode. ... It's an interesting first step. The cable companies are playing the same game."
- "What we are starting to see is the battle for rights. Certain rights owners are saying, 'Hey, Comcast! You can't show the same streaming content on TV, OTT and on the phone.' So HBO2GO is a digital channel. We are seeing little sparks fly over all of these issues. Are Comcast Xfinity and [Time Warner] Everywhere TV efficient answers to OTT? Maybe. Comcast has been innovative and moved quickly with iPad and iPhone apps and they have an existing relationship with customers. If they move fast enough, they are not in a bad position to become your OTT service."
- "On the creative content side, they are stalling and still want to see if that's the way it should go. They are trying to figure out whether they want you to pay Comcast to be paid for the service or whether they want to be paid."

What we are starting to see is the battle for rights. ... Comcast has been innovative and moved quickly with iPad and iPhone apps and they have an existing relationship with customers. If they move fast enough, they are not in a bad position to become your OTT service.

> VP of Marketing & Products Thought Equity Motion

"The potential for developing new [OTT] content is large. We are seeing the space evolve. Michael Eisner has shown that you can create smaller budget, smaller scale content and still produce high quality but at a lower cost. Take Vuguru.com. We'll see the creation of more stuff like this that is cheaper for the Web and OTT. There are no licensing issues because the shows and production are independent from NBC and HBO so they are sold, in theory, without that right conflict. I think what we will end up with is a more diverse array of content choice and a more fragmented model. You will still see the large-scale TV sitcom but also lower-value small-scale content. ... The question is, how do you bring in the audience? It may fall to curation. The model of curation and aggregation is interesting. Do you buy, license and deliver content or is it better to have an editor who curates? Today, HBO is kind of a curator. They find shows, produce them and put them on cable."



- "There is a blurring line between what is a computer and what is a TV. It's all becoming more connected, the TV, the Web and the phone. ... People are used to the idea of paying for a download, and it will be interesting to see how the OTT options play out."
- "Of all the things we are discussing, Netflix and foreign growth/licensing is less familiar to me. When they first came on the scene, Netflix had a nice bounce. People were not concerned early on, and they got the streaming rights through modest deals. Now the owners are stuck. Netflix is big enough, so that it is tough to say. I will not be a partner with Netflix. We will have to wait and see what happens as the deals come up for renegotiation. They may want three times more money. ... With the DVD meltdown, it's hard not to take the offers to distribute their content."
- "Netflix's growth is the same, but at some point in time the pace may slow. At the same time, we are seeing more people get smart TVs and iPads, so the ceiling is high."
- The data cap is one challenge coming up for OTT. The idea of unlimited bandwidth online may come under pressure and push the MSOs to charge more. If you watch more videos and it costs the MSOs more, that may give them a reason to charge more. Will they package the services with the bandwidth or put a meter on it for high-usage consumers? ... Everyone feels that if the Internet becomes the chosen way to watch video, then it can't be unlimited. Something has got to give. That's the difference between broadcast and the Internet. ... There may be a gate put on OTT access because they control the pipe so they could package it in a way that makes you pay for actual usage."

This is the first discussion of caps, so we don't know what will happen. Because the telecom and cable companies are heavily regulated, versus open platform, they in part may want to go to the regulators for relief.

> VP of Marketing & Products Thought Equity Motion

- "This is the first discussion of caps, so we don't know what will happen.
 Because the telecom and cable companies are heavily regulated, versus open platform, they in part may want to go to the regulators for relief."
- "It does not seem we are seeing much cord cutting. We are seeing cord shaving, but consumers still have not dropped their subscriptions. We have seen a large number of consumers go to mobile and eliminate landlines, but cable is not like that. Sports channels have a major following, and they will continue because they are not available elsewhere. For all the talk about softness in cable subscriptions, it really seems more of an issue in certain segments of the subscriber base. I suppose you could drop TV and just get <u>MLB.com</u>, but then you have the rights caveat. If you are watching a local game on your laptop, they can black it out because they want you to watch it on TV [broadcast]."
- "Movie theater attendance will depend on the movie. If you ask me two to three years from now, I would expect it to be compressed and drop slightly."
- "The initial numbers on HBO2GO suggest it is doing well and the numbers are in the millions, which is a pretty good success. HBO has a great library of programs ... and it has put the full catalog on. Best Buy is a curiosity. Vudu and Amazon have similar offerings, but they have good name recognition. Comcast is coming on the side and doing it differently with Xfinity."

3) CONTENT CREATORS

These two sources differed in their thoughts about the future of cable operators. One said the ever-increasing value of streaming rights for content will disrupt the cable-subscription model. The other source said cable companies are shifting to Internet, VOD, cable, apps and search services. Netflix is considered a leader in OTT services. The lack of a simple user interface and quality aggregation and curation services is considered a barrier to the growth of OTT. Licensing of content is a hot issue that is being limited by content producers until the content viewing landscape takes shape. One source expects more content to go directly to the Internet while the other thinks OTT providers will have to deal with the cable companies to be successful.

> Rick Pagano, CEO of Pagano/Manwiller Casting, cofounder of the Rikaroo Film Collective

New content for OTT continues to grow, along with the availability of new creative content on the Web that was previously shunned by the studio film system. Netflix remains a leader. Lacking for Netflix and others is a platform or Web site that aggregates and curates OTT content based on professional film standards. The existing film distribution network



continues to shrink as chain theaters, driven by profit, overshadow independent theaters devoted to the viewing of creative content. Big studios and distributors are just now starting to accept and respond to Web streaming and VOD.

- "The value of streaming rights will eventually disrupt the existing cable subscriber model. New content developed for the Web via OTT continues to grow as producers, directors and actors are shunned by the existing studio/film distribution model and transition into Web viewing. Curation and aggregation remain barriers to Web/OTT growth. The current film distribution network continues to evolve as new technology nudges film forward. Independent film and content creation have been slowly smothered for years under the existing studio model, but new developments suggest a renewal for independent creative content productions. The key rests on sites that can aggregate and/or curate quality productions in a way that mimics the operations offered by the existing studio system."
- "I don't think we have reached the tipping point where streaming rights have become valuable enough to disrupt the traditional cable model. But it will occur one day. It's a commonly held belief in [Hollywood], and people know it's only a matter of time. The time will come because there already are a lot of young people who never turn on the TV. That is a very prevalent phenomenon in Los Angeles and New York City."
- "We are already seeing increasing amounts of new content going straight to the Internet. The big studios are finally starting to invest in new content for the Web, but I have not seen anyone like a Sony Pictures set up a channel. There are Web series all over the Internet, and the structure is huge. You don't see them, but they are everywhere. I constantly hear from actors and producers who are in a new Web series that they want me to be aware of. [The average viewer does] not see them because there is no site that aggregates the content and there is no curator for it. One big question is who will curate, who will

I don't think we have reached the tipping point where streaming rights have become valuable enough to disrupt the traditional cable model. But it will occur one day. It's a commonly held belief in [Hollywood], and people know it's only a matter of time.

CEO, Pagano/Manwiller Casting

review the content and decide what is good quality? That is part of the problem with Netflix. You get on it and it's so big and there is so much you don't know what to do or what to watch."

- "The extremely large film distribution companies have already created an oligarchy. The smaller chain and independent theaters do not have enough money to pay the high real estate prices, and they are going out of business. We are getting larger chain [theaters], and they just want to maximize profit while the studios have a stranglehold over what we see. We are seeing fewer independent productions and the disappearance of big studio divisions for independent film."
- "The result is that more and more independent films do not get screened or released. ... There is some distribution when independent producers go around to the festivals and in that way get a small release. We also see more four-walling of pictures where the filmmaker rents a movie theater space and pays the theater to screen the film. Some movie theaters have become like catering halls that give the independents exposure. So we are seeing more film content being shown on the Web but the problem is, if you have a new movie, you want to drive eyeballs to it. The cost of advertising is very high for a new film. That's why we started Rikaroo, which is a film collective and part of United Digital Filmmakers. It's an industry curator."

VP of a fully integrated global entertainment company and content creator ≻

Cable subscriptions continue to shift slowly, with drops expected over the next three years. Comcast and others are already addressing the shift, developing services that combine Internet, VOD, cable, apps and search. User interface is the biggest challenge and needs resolution for the industry to advance. The number of applications likely will explode, but consumers will have to pay more. The film distribution model has not changed, and streaming rights continue to increase in value, suggesting price hikes. Netflix will pursue foreign expansion. Licensing is a hot issue in Hollywood and is closely watched by content providers, with some limiting rights until the changing landscape takes shape. Winners include content producers and branded subscriber services. Existing players are here for the long haul, and first-round losers already have disappeared. For OTT players to survive, they must infiltrate deployed boxes in the near term.

"We continue to see shifts in terms of subscribers cutting the cord and getting OTT content. For example, I just bought a 55-inch Samsung TV that comes with apps, etc., and I don't even need the cable. I have cut the cord in one room ... but I am connected in all the other rooms. I think we will see more of that in the next three years. I cannot cite numbers or the timing, but we can expect to see a big drop [in cord subscriptions]. But also look at what is happening. Comcast already has a new, second-generation box and test program [Xcalibur] that is heavy



on Internet applications, a Facebook tie-in and VOD, and it combines a DVR with unified search. That is their new interface and next generation."

- "TV Everywhere is really more of a notion. It's Time Warner's cable application because it not really true 'everywhere TV,' and it currently only works within the household. It could have a [out-of-home] feature once it is up and deployed. I even have it in my house, and I can tell you it has a lot of value and is worthwhile.
- "All of the cable operators are offering something, but the big thing that has to change is the user interface. The TV experience is convenient, but the current interfaces are enough to drive you not to bother with it. With Comcast, you can go outside of the house and still watch on mobile/other devices."
- "Applications for devices will continue to grow. I think we'll see apps everywhere. There will be apps for every device, and there are more and more devices out there. If you don't want to turn on the TV, you can use apps to watch on other devices, but we are going to see people start to pay a pretty penny for it."
- "How will the OTT guys work with Comcast and others? They could go through the current Xbox customer, and some OTT [devices/services] might drop out of the picture. I feel there are OTT guys that already go to someone with a deployed box. The second step to TV Everywhere would be to go to the people who do not have service and in the longterm reach out to those with high-speed."

All of the cable operators are offering something, but the big thing that has to change is the interface. user The τv experience is convenient, but the current interfaces are enough to drive you not to bother with it.

VP, Global Entertainment Company & Content Creator

- "No one really wants to stray from the normal business model. ... We think the streaming rights will increase in value. The question is, how do you define streaming? When you talk about disruption, you mean the current economic model and, yes, we think there could be some disruption. The number of points continue to increase on usage and awareness. Netflix had ANU [analog network usage] of 6% in 2010, and now it's more than 20%.
- "Netflix's exposure will expand in foreign markets. First, they will look at and go to territories that are now without service, and within that segment they will go after the English speaking countries first. I don't really know about the Netflix licensing battles, but I can tell you everyone is very focused on it. ... I was not surprised to see the price increase. If you look at their business model, they may have picked up more people at the lower price points. But look at the changing landscape and do the math; it's a simple equation that takes the number of customers and the average price point on a monthly basis. They have no added content coming in but operational costs are increasing. The price increase was inevitable.
- "As for new content developed for OTT, we can only work with the content we control. Right now, we are limiting the content [made available] until we can better evaluate what it going on in the space."
- "Film distribution has not changed as of today, and it remains consistent. I have no idea what will happen. The new economic model I do see tied to market opportunities would involve bulk buying and group buying by the content providers. That would get more people into the services."
- "There is only so much space, so much bandwidth, and consumers only have so much time."
- "As for winners and losers [in OTT], it will be like the early days [of TV] when the only survivors were those who had a brand name. Whoever has the most customers will survive and succeed, and that would include Amazon and Best Buy."
- "I think a number of players have already lost. We have seen a number of them who have already come and gone."
- "We are going to see everyone out there testing premium VOD, but we need to find what works. What is happening now is that everyone is trying to put something into the market to test."

4) INDUSTRY SPECIALISTS

Two of these three sources said Netflix has the advantage in the OTT industry. One expects Netflix's growth to slow because of data caps, bandwidth usage fees and rising distribution costs for streaming services. A la carte OTT will have a tough time surviving, and one source thinks this will push people toward cable services. Existing distribution services have a solid advantage in the current market although they may look a lot different in the future. One source expects the existing model of creating, distributing and viewing movie content to remain intact. Cable companies have the advantage of existing distribution



networks and a subscription-based business model to support content production. OTT will have to negotiate with cable companies to deliver services, and that alone gives cable firms leverage. Aggregation and curation services are viewed as a must for OTT services to expand.

> Leading telecom journalist who has worked with content delivery networks (CDNs)

Although distribution technology is shifting largely to IP, this source does not see multivideo aggregation going away because of the business model's importance to content creation. The network advantage is key. OTT distributors can partner with CDNs, but cable and telecom operators still control much of the network. She is optimistic about Netflix's continued success because of price point and product. She was less bullish on the a la carte apps because of price; at a certain point, most people will just subscribe to cable. Operators and programmers will struggle for rights to distribute outside the home. This source is watching the long-term possibility that IP delivery will allow operators to compete in each other's markets.

- "There seems to be a lot about the idea that OTT is coming in and will kill cable. That depends on how you define the cable companies. Is this going to kill multivideo aggregation? No. I don't think that's going to disappear. There are too many damages. Is it going to kill the tech we use to watch it because everything is shifting to IP? Everybody is doing that. Is cable still going to be around? Yes, it's not going anywhere."
- "As far as cord cutting, I have not seen any really compelling evidence that people aren't spending the money to get pay TV services. Will there be some shift? I certainly think as people add on Netflix, Hulu, etc, there may be cord shaving or it may turn out that revenue goes down in certain aspect of multivideo distribution and it goes up on the high speed data side of the house. It may be that ultimately the Netflix and Hulu become another option and become a lower-tier cable company. ... There's too much current premium television that's being offered through existing pay TV to be at the stage where you can get the same type of experience cheaper over the Internet."
- "Cable companies are working on getting live television from major networks to mobile devices to be delivered over the top. That's what they're going after first. In terms of on-demand libraries, it's going to definitely take time. ... They'll look at charging for that because content owners want to get paid for that additional distribution channel. Broadcasters have had that golden goose for so long of advertising plus subscription fees, and they don't want to give that up. ... When you start getting into premium content and live content, the negotiations get nastier. They all have to deal with the content providers demanding X amount of money, and for the distributors to charge that, they need a subscription or per-use fee. Netflix has managed to do that and done an awesome job at continuing to work out deals. But their content is still limited. Whether it's Comcast or Netflix, it gets harder to keep those prices down."
- "I do think that the cable and telco TV providers, including AT&T [Inc./T] and Verizon [Communications Inc./VZ], have a massive advantage of the network side. As far as cable exists, it has an advantage. But as IPTV grows, OTT distributors can get in bed with CDNs and combat that network advantage. But I don't want to understate the network advantage of cable because it's such a barrier advantage. There's a period that OTT distributors can work with CDNs, but that just builds up the power of the CDNs. The fact that the cable and telco providers already have that shouldn't be dismissed. Yes, they can squander it and screw it up, but I think it's a big, big argument on their side."
- "I think we're going to get greater tiering of services. Netflix has set itself up as the nation's VOD. They're the one on-demand service that's available everywhere. There's some teaser premium content that they'll

I love the arguments for a la carte, but it's the same argument for why you need subsidies for the arts. You have to subsidize to bring new content to the table, so you can finance high budget content.

Leading Telecom Journalist

pay for. Netflix is more analogous to HBO than a cable company. What we may see is a certain category of distributor, but we will see a larger aggregator because that's what you need for content creation. I love the arguments for a la carte, but it's the same argument for why you need subsidies for the arts. You have to subsidize to bring new content to the table, so you can finance high budget content."

"At what point don't you decide you'll get a package for \$150? If your interests are so narrow you only want one app, then maybe it works. There will be rabid baseball fans who'll want the extra content. That's where I think the money will come from. Either it will be so expensive on an individual basis, or people will pay for a bundle. The reason we've gotten away with DVRs for so long, which allows me to skip commercials, is because we

haven't had that many people with DVRs. That's where OTT distribution is today. We're getting away with it because the vast amounts of people are still watching TV."

- "There's going to be OTT distributors, and that's a tough game. Netflix has done an admirable job. There can't be too many winners in just OTT video distribution. It's a small category. There are all kinds of tech enablement folks that'll deal with compression, formatting and encoding. Getting the right bit rate, getting to mobile devices, security, DRM. There is a big playing field there. That'll spread a lot of money to those who can improve performance and access. That's a group of winners. MobiTV [Inc.] is an example. CDNs do pieces of that. I think there are people who own networks, the last mile like cable companies, and the middle mile ... and a category of interface where you're talking about search and software, and a lot of people are vying for that space. I think there will be a limited number of winners there."
- "Netflix continues to surprise me. I do think their success will continue. I was more nervous six months ago. They continue to handle themselves remarkably well, carving out a niche that people want. It's not a replacement, but it offers something that cable doesn't. And that's enough for some people. They don't have to be everything. Yet they have enough clout. They've come through the hardest part. I think if they can continue and be successful at offering back catalog and teaser content, and the right balance between the two, they'll continue to do well."
- "HBO is a phenomenally interesting case study. I don't get HBO, and I still have this mindset of my cable bill is high enough and I don't want to spend the money for HBO content, but it comes out in other forms later through Netflix and rental, so I'll wait. Though I'm not in the majority, likely. Certainly, HBO has made a big deal about the number of downloads for the app. If you have HBO, why wouldn't you love HBO2GO? It seems like a no-brainer."
- "People still pay for movies. If the pendulum swings one way on TV, that may make movies more valuable, which will create miniseries, which then gets us back to TV. It'll swing back and forth. It may be that the younger generation is being habituated to lower quality content, but I think it'll have to swing back at some point.
- "It makes me wonder if we're swinging back toward the old movie studio model where you had a picture house and they directed what came to movie screens because that's where the trust came to bring in dollars. There seems to be a desire to rely on names for high-budget content. How often we can break away from that, I'm not sure. It comes back to the concept of subsidies. As long as you have bundles with built-in margins and you don't have to succeed, you can take risks on different content. If you're dealing with 'I only want what I want and when I want it,' you consolidate creative power."
- "Streaming is just another distribution channel. It's going to be messy in the short and medium term. I think the broadcasters will do everything in their power to get paid six ways to Sunday."
- "Given that things are moving in a global way, eventually, you're going to talk about competition across the nation. The only reason to regionalize doesn't exist with IP. Who owns the network where and who gets paid for what is another piece of the equation. The cable companies could start selling in each other's markets. Verizon isn't part of the gang of cable, so they have already talked about someday being able to offer TV as an app. Why not offer that as a nationwide service? Then cable ops will say you can offer a competitive advantage, and decide they want to do that nationally. Comcast owns the last mile and are powerful there, but if they went national, then they don't own the last mile and there are tons of spaces between those last miles where they'll build out. But they won't want to do all of it and will rely on other partnerships. Owning network pieces is a powerful advantage, but no one will own everything in a global distribution change."

> Cable specialist who has represented the cable industry in lobbying and negotiations

The network advantage positions the cable industry well with operators that own programmers. Cable's control over content is lessening, and the relationship between operators and programmers is showing some "fissures." This source is awaiting a "killer" TV device that would take IPTV delivery to the next level, and is monitoring whether the younger generation will take to cable subscribing. He thinks Netflix's content costs will continue to move up and that programmers will have a "day of reckoning" as they contend with the cannibalization of their cable revenue. Cable is moving aggressively to put its content on a cloud and to have better control over the entertainment program guide (EPG) and user experience, with less dependence on set-top boxes.

"People are consuming content online. I've seen numbers about the number of people watching TV with an iPad and a laptop as they watch TV. People's behavior is shifting. People used to go to the kitchen

The programmers and operators have had a symbiotic relationship for a long time, but you're seeing some fissures. Some programmers are exploring new models, but some may cannibalize revenue.

Cable Specialist



during commercial. Then you had the DVR. Now you have the ability to check your stocks or do whatever you want. Eventually, that'll all merge together. A lot of the discussion has been around the programming guide and how to use it as an interactive guide and use widgets. You look at Comcast and what they're working on to share on Facebook what you're watching. Cable is exploring new and interesting ways to do that, and I think they'll be better off."

- "I don't think cable will control content to the same extent it has. You can see how much content that's been available on Netflix and Hulu and what not. People will pursue their own self-interest. The programmers and operators have had a symbiotic relationship for a long time, but you're seeing some fissures. Some programmers are exploring new models, but some may cannibalize revenue. Some may give so much away that it's hard to sell what's left. HBO, conversely, makes everything available online, but you have to be cable subscriber. If they went a la carte, they'd see cannibalization. The operators still have access to the home and will be able to negotiate with the programmers. The challenge with OTT providers is that you're always going over the competitors' network and there's leverage there."
- "With the net-neutrality regulations, it becomes very difficult for cable companies to do anything to OTT providers. What you're more likely to see is cable operators say to programmers, 'You can't give away content and expect us to pay for it. Cable is putting your content in X million homes versus an OTT provider that must compete with 15 Web sites.' That OTT model doesn't work, and cable will have leverage not to pay programmers. Programmers realize they need those operators to carry them into homes. I think the programmers will have a day of reckoning."
- "Cable has always seen growth and trends at opposite ends of the spectrum. They have older dying-off subscribers and newer, younger subs. ... It's always followed an interesting pattern in that younger people don't see the need to sign up for cable. The real value for cable comes when they get into their late 20s, get married and the social life slows down and you've got a family. Now you've got family viewing.'
- "Kids that are growing up today, that are in their teens, have been consuming all this content on mobile devices and the Web. ... Will they get cable when they start having kids? The consumption pattern in the kids is changing so much, but we don't know what the implications will be yet. One of the interesting things is that the number of disruptive devices-Apple TV, Roku, Boxee, Google TV-is that there's an opportunity for the right device to be as disruptive to TV as the iPhone was to phones. My personal favorite is the Apple TV because it has all of iTunes movies and TVs. But somebody is going to figure out how to make a box completely neutral. Kids that are growing up today, If someone can do that and load up Hulu, Netflix, Amazon all at once that are in their teens, have and make it flexible, that will be big. Boxee tried, but the content been consuming all this industry balked. There are rumors that Apple has the Internetcontent on mobile devices and connected TV to end all Internet-connected TVs. Something like that would have some dramatic impacts."
- "The Hulu model doesn't bother people when it's free. You have a lot of content on the site and are exposed to new content. I like the iTunes model and paving \$3 for a movie. People are OK with limited new movies on Netflix and yet complain about a la carte. If I were a cable operator, I'd be looking at how I can deliver my content more like the iTunes model. Now that everything is digitally delivered, I'd like to see cable approach an iTunes model. You can subscribe to premium shows and use that money to finance other shows. I think there could be interesting models there: a la carte by show instead of channel."

the Web. ... Will they get cable when they start having kids? The consumption pattern in the kids is changing so much, but we don't know what the implications will be yet.

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- "I think any business is in trouble on a long enough timeline. Do I think cable is in trouble in the next five to 10 years? Probably not. There are a lot of different technologies popping up every day that will impact cable. In much the same way that cable looks different today than it did 30 years ago, it will look different going forward. The question is does it continue as a large distributor of content or as large a provider of access to content?"
- "I noticed the other day when I went to the Netflix site, it used to be described as watching movies online; now it lists watching TV online. They've actually taken the focus away from watching movies online. Now it's specific about TV watching online. They've shifted from the mission of delivering movies, and now they see themselves as delivering TV. Do I think there's room for them to grow? Absolutely. I watch a lot of Netflix because it gives me catalog content for my kids. But it hasn't displaced our TV viewing because I want primetime viewing. I want



original new programming. I don't know they'll be the model everyone goes to first, but they'll be the model people go to second."

- "The programmers are going to start to say, 'When Netflix was novelty and had a small audience, we could afford to do that at lower rates. Now they have a massive subscriber base and they're not delivering a minor piece of our business and are starting to compete with us.' I think the programmers will demand to be compensated relative to the audience, and that's problematic for Netflix because they haven't adjusted pricing. There have been so many discussions of cable and their rates, and those have been driven by programming. Content providers are creating more and compelling TV and demanding a premium."
- "Netflix is going to end up in the spiral at some point. Netflix will have to ask for more money, and I wouldn't be surprised if it goes to \$20 or \$30 over time. You'll have the same issues with programming costs. ... They're realizing they have to produce some of their own content. ... If you own the means of production, you can better regulate the costs. That's why you see operator/programmer integration. When House of Cards airs, it'll be interesting to see how many people air into Netflix for that opportunity. It requires customers The one clear winner from all of to think of Netflix differently. I can only assume that at some point, with this is the consumer because original programming, they'll want to sell advertising. There'll need to be audience tracking and demonstrating that people are watching.
- Vimeo [LLC], but very few have the audience close to TV." "The one clear winner from all of this is the consumer because all of this has created interesting content. The fact is that you have so many different opportunities for entertainment."

That'll be the challenge. There are a million original Web series on

"On the industry side, I think cable stands to win because they'll deliver TV the way it has they have or they'll do broadband. But they're part of the equation. Until we have a different way of getting content, a

of this all has created interesting content. The fact is that you have so many different opportunities for entertainment.

Cable Specialist

different network, you need cable. Cable companies that have integrated with programmers, like Comcast and Time Warner, have a leg up because they don't have to pay as much for programming. OTT providers will not rise to the level of cable companies. Even though Netflix has surpassed Comcast in subs, it's making a modest income. That says something. There will be a lot of OTT providers that do well but don't compete. In terms of the programmers, the number of delivery options, whether that's broadcast, cable, TV everywhere, OTT, the options are astounding."

- "As everything opens up and you have less of an need for a traditional EPG, it'll be hard for companies to build their operations around that. I think one of the interesting options available is that Rovi has interesting experience with user design. Even if we go to Web design, we'll need better user interfaces. There's a potentially hugely disruptive device. iPhone gave you a revolutionary way to interact with your phone. Someone who can do that with a TV would be interesting. I have a Wii in my house, and I'm surprised that no one has made a motionsensitive remote and used it to navigate my EPG that way."
- "I saw Rovi at the cable show in Chicago. There was a lot of user-interface companies there. They're trying to work with cable companies in how to position content on the screen. A lot of companies are moving to a cloud model that makes the set-top box less important. You're moving so much function off the set-top box. You can run a thinner client. ... You don't have to access all that programming info on the set-top box. If you don't have to shell out for set-top boxes, the cable providers wouldn't have to invest in that hardware. There is this belief that cable is in love with the set-top box, but cable companies actually hate them. And they wanted to build it into the TV, but it wasn't possible."

Steve Effros, president of Effros Communications, a telecommunications/cable consultancy; repeat source ≻

Netflix is entering a new phase that will slow its pace of growth and illuminate emerging battles over data caps, bandwidth usage fees and distribution costs for streaming services. Effros doubted an a la carte model for OTT would survive or appeal to consumers, who would be forced to pay higher prices for content. Aggregation/curation and editorial oversight are a necessity for OTT growth. Widespread cable cutting will not occur because cable is the delivery pipeline for TV and the Internet, whether wired or wireless. Applications and services such as HBO2GO have strong appeal, but only a handful would affect the market. The existing model for creating and distributing movie content and viewing remains intact.



- I assume Netflix has a great opportunity in foreign markets. Asking about their foreign growth is like asking if the first person over the finish line will win. Will they be the last or the best or the cheapest company to enter foreign markets? Maybe not. And it also is valid to ask if there is enough bandwidth available in foreign countries or anywhere for that matter."
- I don't see the battle between Netflix and Sony as a licensing battle but rather as a contract negotiation to determine how much it should cost to distribute content. Why anyone would think that Netflix is immune to distribution costs just because they stream over the Internet? They are a disc library, and they distribute streaming video. Why should they be treated any differently than other distributor? ... They don't have to pay for production costs, and they don't pay for delivery costs. How long did you think that would last? The broadband delivery costs have to be shared between the companies that benefit or the subscribers. Sure, it worked for Netflix for a while until reality came into play. Meanwhile, they just increased their fees by 60%. If the cable companies did that, they would be hanged."
- Their continued growth will depend on price. They just increased the price. Will they grow at the current pace? No. Remember, Netflix is an older movie library service. They have only 20,000 titles versus DVDs, which account for 100,000 titles. They offer less and increased the price. They will soon find themselves with serious competition. Netflix has done a great job. They dropped into a perfect position at the perfect time. ... The product acquisition cost was low and the distribution cost was low. It was a brilliant plan while it lasted. Could it take another two to three years to catch up with them? Maybe. But it is inevitable."
- "I don't think they would accept losing content. It will just cost them more. What good is a library without a lot of books? It just means their cost structure must change."
- There is all this silliness around Netflix. It is not second to Comcast. It's a company with a movie service, at best. It is not an ISP or a cable company. People don't buy HBO to watch their library of older films. They buy it to watch the new stuff. ... Why would anyone think Netflix competes with Comcast? Is one company affecting the income of the other? Yes. Will people addicted to multichannel video and gaming drop those services because of Netflix? Why would they?"
- The data caps were inevitable. You either have caps, or 'buckets,' or usage meters. It's already the case in wireless, and it will be the cases here. Wireless companies cannot increase capacity without raising the price. They can either cap the usage, or they can have the customer that exceeds the cap move to the next bucket. Or, they can work with a pure meter system. South Korea and Europe have moved to meters. I originally thought meters would be used here, but I've seen studies from East Asia and they don't work that well. It's too complicated. So they likely would go with buckets, which have succeeded in the telecom space."
- "HBO2GO is a great service. It's a good offer available to anyone who buys HBO. But it will be a complementary service, not a substitute. Would you rather watch a movie on your iPad or a 55-inch screen?"
- "Are streaming rights valuable enough to disrupt cable? If by streaming rights you mean 'disaggregated programming,' let's look at the newspaper model. Instead of subscribing to the New York Times and reading David Brooks' column as part of the paper, I would buy it separately. It ain't gonna happen. Someone might pull it off for a while. But if you break the content into its component parts and sell it individually, who will bear the marketing costs to make sure the content is read?"
- "There will be more apps. But of the 100,000 apps already out there, we can probably name 10 that have made someone a million dollars. There are some great apps out there, but it's not the basis for a business plan."
- "Advertisers are paying to put their message in front of 98% of the audience. But with the a la carte model, now they are only in front of 25% of the audience. So they have to raise their fees."
- "There has not been significant cord cutting. We just use the cord differently. We still own a cord. Cable already delivers electronically and the delivery is more efficient than OTT. Will someone use the inefficient way because they feel it is free? Yeah, until they get the bill."

Way because they feel it is free? Yean, until they get the bill.
 "I don't think the theater model will change, but I think the window of sales opportunities might change. Right now, a new film goes to the theater on first run, then to DVD, then to pay TV and then to a library or into syndication. Again, the window might change, but I don't think first-run viewership in a theater would change. Watching Avatar in a movie

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theater is different from watching it on Blu-ray versus on a cable channel. ... We use these different viewing mechanisms for different purposes."

5) CABLE AND OTT CUSTOMERS

These four sources were split by generation in their decision to keep or cut cable services. The two 30-somethings have considered cutting or shaving, and both would stop service completely if they could. The two remaining sources are in their 50s or 60s, and are comfortable with keeping their cable. One cut service from Netflix and added a premium service from Comcast. The other was upset with Netflix's recent price increase and is considerable stopping the subscription.

> 31-year-old woman, San Francisco

This customer is considering canceling cable and is trying to figure out how to view live sports outside of using cable.

- "I am considering cutting cable. A friend of mine is trying to convince me to get rid of it and buy a streaming device, like a PS3, though I don't think I'd ever be the person to buy a gaming console."
- . "The issue with canceling cable is that I love college football and baseball. I've thought I could get a digital converter and then get CBS because it shows SEC football, which is what I'm interested in. And then I'd go to a bar to watch the games that weren't on basic cable. It might get me out of my apartment, which would be good."
- "I'm not a Netflix customer, though I've thought about it. I have a standard definition TV and a Blu-ray player, which my parents got me, but I haven't yet figured out how to make it all work to stream Netflix."
- "I still watch a constant amount of TV. ... But I could see myself living without that stuff."
- "I watch on my TV. I haven't figured out how to watch on my laptop, and I don't have a tablet."

≻ 31-year-old man, San Francisco

This source considered canceling his cable but said his roommate wants the Food Network and ESPN. They ultimately decided to downgrade their package. He is a new Netflix customer and is fine with the recent price hikes. He prefers ondemand content, which he watches on his laptop and TV.

- "I almost canceled cable, but my roommate wants the Food channel and ESPN. We're downgrading from a premium package and getting rid of HBO. I also think we may be getting a more basic package. ... I think the only reason to have cable is sports. If I moved out, I wouldn't get cable. I'd be OK with Netflix. Cable is a distraction."
- "I'm concerned about video stores going out of business because a lot of indie content is not available via Netflix or online distribution. Even with the new Netflix price hikes, I think it's still reasonable for what you get. With iTunes, you have to download, which takes forever and it's expensive. Netflix is fast, and it has a great collection of documentaries."
- "I either watch on the TV or my laptop. I watch Netflix on my laptop though I watch less Netflix on my laptop since I bought an HDTV. I got tired of watching TV at a desk versus on the couch."
- "I haven't watched any pay VOD on cable, just limited to free ondemand."

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Cable & Netflix Customer

San Francisco, CA

- "I feel I can't get the content I want right now. ... I used to have the video store, but that's gone now and some films I just don't have access to."
- "I think it's interesting how I'm less committed to a viewing experience than I was with DVDs. I'll just stop watching midshow. All these variations of on-demand are weird. On-demand Fox won't let you fast-forward through commercials. It still seems uncertain how everything will work."

62-year-old woman in Los Angeles ≻

This consumer is not canceling cable and recently hooked up a laptop to her TV to stream Netflix. She is irritated with Netflix's recent price hikes and is trying to figure out if she will cancel the DVD or the streaming service.

"We're not thinking about cancelling cable. We have DirecTV. Occasionally, they give us free Showtime. We get HBO."



- "About six months ago we got someone to hook up a laptop to our HDTV so that we can stream Netflix direct to our TV."
- "I'm watching the same amount of TV that I was a year ago. We stream Netflix but it's not more TV watching. If there's nothing on, we watch it in place of cable. We've never ordered any VOD content but we've been tempted to because they have newer movies which we want. I think we might have done it once."
- "The rates on Netflix went up this week, and that irritates. It's now \$16. We get the discs and then have to pay another \$8 for streaming. There aren't that many good movies on streaming. I'm thinking about canceling one or the other of the services."
- "I don't watch movies on my computer. I use my computer for work."

> 51-year-old woman, Florida

Cable via Comcast is this source's primary source of content. She watches more TV now than six months ago because she bought a larger-screen TV. Cable service with HBO is part of the condominium homeowner's association package, but she also added high-speed Internet service and Showtime. She was unaware of HBO2GO. She dropped Netflix several months ago after having the monthly mail service for roughly a year. She said she did not watch movies enough to make the subscription worthwhile.

- "I watch a lot of TV and would never consider canceling my cable service, but it comes with the condominium contract and includes HBO. I have actually added to the service, which means extra charges. I added high-speed Internet and recently added Showtime. The Internet is too expensive, but my family needs it and the Showtime was only about \$8 to \$9 more."
- "I only use my TV to watch."
- "I had Netflix for about 10 months and never seemed to have time to watch the movies. Then my DVD player broke. ... Also, they have a lot of movie choices, but I just never seemed to find a movie I really wanted to see. When I did I later noticed that it was also coming on HBO or Showtime. I get a lot of e-mails from [Netflix] asking me back. ... I wasn't aware of a price hike and can't really say how that would affect me."
- "I don't know about HBO2GO. I haven't seen anything about it. ... I don't really read the junk mail that comes from Comcast. Now that I know, would I use it? Probably not."

6) MOVIE THEATER CHAIN

This source said VOD's effects on movie attendance is not quantifiable yet. Producers have run tests of VOD and are withholding the results. This source said this confirms that VOD could cannibalize revenue and that studios already are backing away from the technology. The days of the sweetheart deals for content are over, and Netflix will pay higher fees for rights to stream the content. Movie patrons are starting to resist the price premium for 3-D animated content, and movie attendance was down 5% through June year to year.

> Owner of a regional Midwestern theater chain

This chain has not yet been affected by premium VOD, but the source is cautiously optimistic that studios are backing away from VOD plans because of likely cannibalization of theater revenue. Attendance was down 5% through June year to year 2010 but on par with 2008. Moviegoers are beginning to resist the higher prices for 3-D animation films. Netflix will become a bigger player in ondemand film viewing though it will have to deal with escalating content costs.

" "It's been a good summer so far business-wise. It's going well. I always get leery comparing one year to another because the movies are different. You have a different product every year. I look at attendance year to year because it ignores inflation. June looks good. Our June this year is lower than 2010 and 2009 and on par with 2008. We're down 5% in attendance for the first six months of 2011 versus 2010. Through May, we were within 300 people in terms of attendance as last year. It's very similar." We've hit a tipping point in terms of what families will pay for 3-D. We think the studios are listening because they're loosening the restrictions on when you have to show something in 3-D.

> Owner, Regional Theater Chain Midwest

"Green Hornet hasn't performed as I thought it would, but Pirates and Bad Teacher have done well. Cars is OK.
 With the 3-D phenomenon and looking at the attendance figures, we're seeing some price resistance."



- "We've hit a tipping point in terms of what families will pay for 3-D. We think the studios are listening because they're loosening the restrictions on when you have to show something in 3-D. The perception on who 3-D appeals to is changing. We hope directors and studios are changing the viewpoint in response to consumers voting with their pocket book. That's a recent development, and the view has changed in the last six months. And theaters are offering both 2D and 3-D viewings."
- "Premium VOD is too small to see an impact yet. The fear is if it goes wide. DirectTV [DTV] doesn't have that many subscribers capable of seeing it. ... I haven't seen any anecdotal evidence of people waiting to watch movies on premium VOD. ... The few tests film companies have done in Europe with Winnie the Pooh, they didn't release the results. We assume from them not releasing that it did hurt [theater revenue]."
- "Studios are very tightlipped about premium VOD. It appears they are quietly trying to walk away. NATO [National Association of Theater Owners] has asked for experiment results, and they haven't been released. I have heard some reports from people who are saying the studios are backing off. There is less enthusiasm. It would appear that it's happening. If the studies indicated that premium VOD was increasing revenue without affecting theater chains, they'd be releasing and touting the data."
- "It does look like Netflix is going to become a bigger player. I think in terms of the cable companies ... it's just easier if you can stream it at a fast rate and the computer is hooked up to your computer and Netflix becomes a bigger player. Yes, there will be some licensing issues and that'll shake out. But we're moving toward that world. Netflix has been right in getting into streaming and getting away from physical discs."
- "If the cable companies will be able to adapt is a good question. It's about convenience for the consumer and ease of simplicity and price. I do think there's going to be a shakeout, and everyone is trying to set

Netflix has been right in getting into streaming and getting away from physical discs.

> Owner, Regional Theater Chain Midwest

up their own streaming system. The established players with the deepest pockets tend to wind up on top. The guys entering the market late will be the ones who struggle. Cable is easy. You don't need technical knowledge. You offer video on demand, and you don't have to hook up a computer. Streaming relies on people a bit more tech-savvy. It's a bit younger demographic. The cable companies may be appealing to an older demographic."

- "Blu-ray hasn't lived up to expectations. The quality difference is so negligible. It's not the big difference between VHS and DVD. That was a major difference. Between DVD and Blu-ray, there's not a big enough difference."
- "TV broadcasters have upped their game on what they're producing. I think studios are trying to improve their content. I'd argue in a lot of cases they have. We are seeing a lot of remakes. But they've come up with original concepts and new ideas. Do the studios need to improve the two-hour movie? Yes. But they've done an awful lot. They've done what they can with special effects. Transformers was amazing in terms of digital effects. Movies seem to resonate, and they'll typify an era. I don't think we're in a long-term decline of theater-going. ... But we always need better pictures."
- "Finally, the studios understand the value of streaming rights, and they're negotiating with better awareness. And, sure, Netflix is screaming. They're holding streaming to the same standards as cable and theatrical. It's the real world as agreements come due. They can't get sweetheart deals anymore. Welcome to the game we've all been playing."

Secondary Sources

From our secondary sources we learned that CBS and Amazon struck a deal for streaming content that should step up the competition with Netflix. Tablets and the iPad are expected to change the way we watch TV, with owners increasingly using the devices to view videos. Cable shaving of premium services is seen as much more of threat to cable operators than cable cutting. HBO is fighting back with HBO GO, a mobile version of video streaming. Finally, pay-TV subscriptions grew 11% year to year, and Comcast is a leader with 22.8 million subscribers.

July 20 article from The Wrap >

A deal has been struck between CBS and Amazon for streaming rights to more than 2,000 episodes from 18 shows. This is expected to intensify the competition between Amazon and Netflix. The possible sale of Hulu also was discussed. http://www.thewrap.com/tv/article/cbs-amazon-announce-streaming-deal-29255



- "Competition for the streaming audience just got more intense, with CBS and Amazon.com announcing a deal Wednesday that will allow viewers to stream 2,000 episodes of 18 shows from the network."
- "The CBS pact signals that Amazon intends to be a big competitor in the subscription streaming market—a space that has been dominated for the past two years by Netflix. For Netflix, the increased competition could be worrisome. Citing postage costs, Netflix <u>hiked its prices on its most popular subscription package by 60 percent</u> last week, leading to lots of outraged customers."
- "Adding further uncertainty to the streaming picture, <u>Hulu is up for sale</u>, and generating interest from the likes of Google, Microsoft, and even Amazon itself."

> July 6 posting on Videonet blog

Tablets are changing the way we watch TV. Even though the adoption of tablets is in its early stages, the number of owners using them to watch video content is high. Operators may use this opportunity to cash in on this emerging market of viewers.

http://www.v-net.tv/Blog.aspx?id=880&title=how-tablets-are-transforming-the-tv-landscape

- "Is our addiction to tablets starting to change the way we watch TV? According to a study released by AC Nielson, 70% of tablet owners and 68% of smartphone owners use their devices while watching television. While the tablet can distract from the main TV event, it also presents a huge opportunity for TV operators."
- "Tablets like the iPad and Motorola Xoom are positioning themselves as a media portal, and excel at playing high-quality video and TV content. And the media strategy seems to be working; according to a recent study in the UK, iPad owners are consuming a lot of TV on their tablet: 1. 87% watch YouTube 2. 74% watch catch-up TV 3. 52% watch iTunes videos 4. 38% watch live TV. 79% of app downloaders have paid for content in the last year, which provides a great opportunity for TV operators to generate new revenue streams."

> June 3 Fiercecable.com article

OTT's ability to lure pay-TV subscribers away from premium service is much more of a threat than full-fledged cord cutting. HBO is fighting back with pending agreements to distribute its content on Time Warner Cable and Cablevision Systems (CVC) for its new HBO Go product.

http://www.fiercecable.com/story/report-ott-chip-away-pay-tv-premium-services/2011-06-03

 "A report from The Diffusion Group (TDG) claims that there's been too much attention focused on over-the-top as a cord-cutting phenomenon and not enough on the ability of nontraditional content to erode pay TV's traditional premium services tier."

> May 17 posting on IPTV News

Pay-TV services were up 11% year to year despite operators' concerns of subscribers cutting the cord and moving to OTT services. Bundled services including voice, video, data as well as advanced services are driving the pay-TV providers' growth.

http://www.iptv-news.com/iptv_news/may_2011_2/pay-tv_remains_robust_despite_allure_of_ott

- "Worldwide revenue from the provision of pay-TV services hit USD 240bn in 2010, up 11% from one year previously, despite industry fears of consumers 'cutting the cord' and switching to over-the-top (OTT) services."
- ""We're seeing continued growth in the pay-TV market, driven by providers' ability to offer voice/video/data service bundles, a broad range of linear and on-demand content, and advanced services, such as multi-room DVR and multi-screen video delivery,' said Teresa Mastrangelo, directing analyst for video at Infonetics Research. 'Although cable MSOs continued to be challenged by competition from IPTV and satellite operators, the overall market remains robust, despite the attractiveness of over-the-top (OTT) services.'"
- "DIRECTV leads the worldwide pay-TV market both in terms of Average Revenue Per User (ARPU) and overall video service revenue, and the top 20 revenue leaders reportedly account for 53% of total video services revenue. In terms of subscribers, Comcast maintains its lead with over 22.8mn video customers."

Next Steps

Blueshift will research companies like Ascent Capital, which provide backroom services to the OTT industry. We also will determine whether Netflix can maintain its top position, especially in light of competition from Amazon. We also will monitor



content rights, data caps and bandwidth usage fees. We will review the cable companies' efforts to expand their OTT services and we will try to determine how generational attitudes and viewing behavior may impact the adoption of OTT.

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