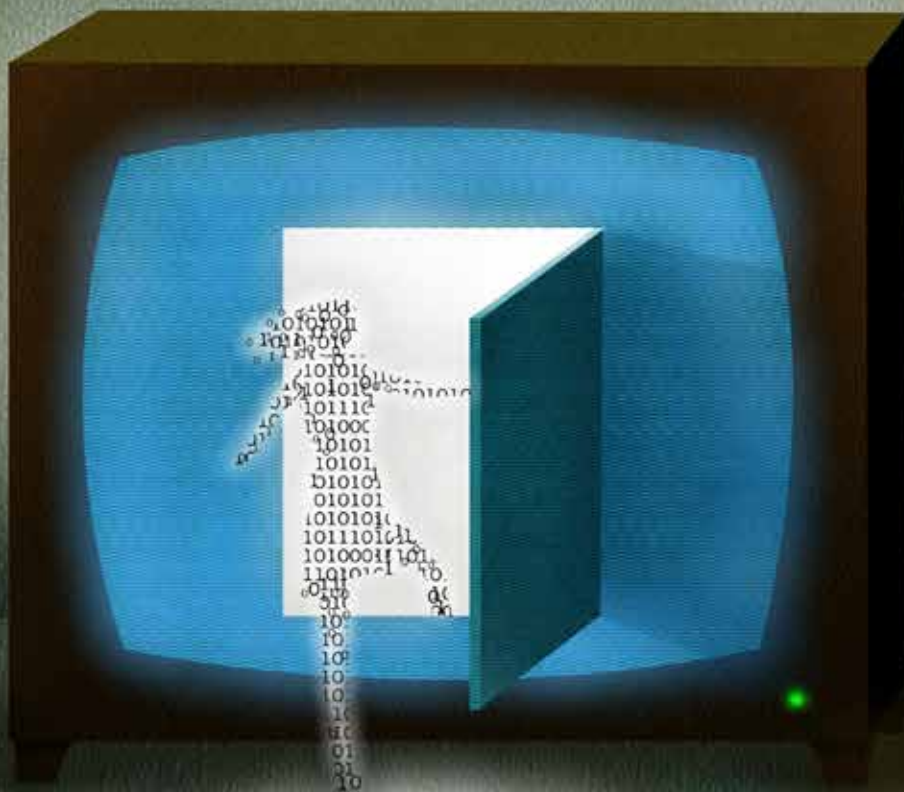


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## The Digital Revolution Is Disrupting the TV Industry



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# The Digital Revolution Is Disrupting the TV Industry

**Neeraj Aggarwal, Frank Arthofer, Fredrik Lind, John Rose, Jacob Rosenzweig, and  
Joachim Stephan**

March 2016

## AT A GLANCE

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The global television industry is in the midst of a digital revolution. Streaming video is going to be more disruptive than anything this industry has seen before.

### **WHAT'S CHANGING?**

Online and mobile pathways are radically altering consumers' viewing habits, threatening long-standing business models, and changing the rules of the game.

### **STAYING RELEVANT**

Although industry shifts have been gradual thus far, it is highly likely that the pace of change will accelerate. We identify four potentially disruptive scenarios. The winners will be those that aggressively manage the digital disruption, repositioning their asset base, organization, and capabilities to thrive in the new landscape.

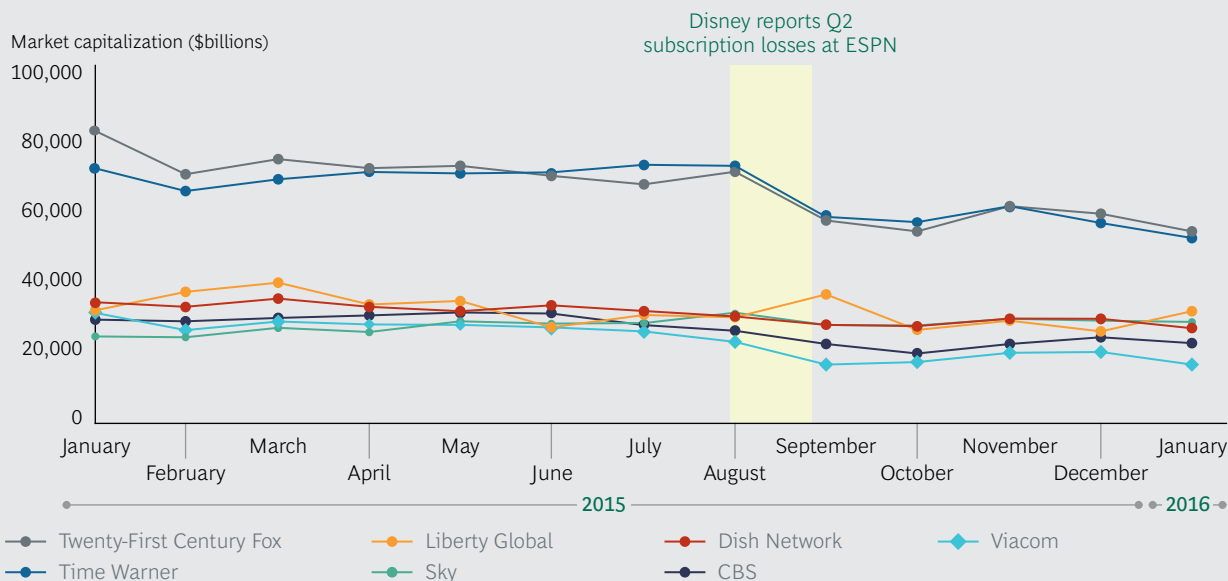
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**T**HE GLOBAL TELEVISION INDUSTRY is in the midst of a digital revolution. Online video has been spreading like wildfire, empowering consumers to watch what they want when they want it, sometimes cutting TV out of the equation altogether.

Networks, with their long legacy of linear programming (that is, airing news, sports, and entertainment at set times), are fighting to stay relevant. Cable and satellite companies, too, have seen their traditional bundles come under attack from a slew of streaming à la carte offerings. Content producers are scrambling to develop hit shows that can help networks and digital aggregators differentiate themselves and capitalize on evolving consumer preferences.

With so many across the industry jockeying for position, the market for media stocks has become extremely volatile. In August 2015, The Walt Disney Company reported lower than expected earnings—the result, in part, of ESPN subscription losses—fanning widespread fears that viewers are opting for less pricey cable bundles or dropping cable altogether. (See Exhibit 1.) Industry giants, such as Twenty-First Century Fox, Time Warner, Liberty Global, Sky, Dish Network, CBS, Viacom and, of course,

**EXHIBIT 1 | Reports of ESPN Subscription Losses Drove a Media Stock Sell-Off**

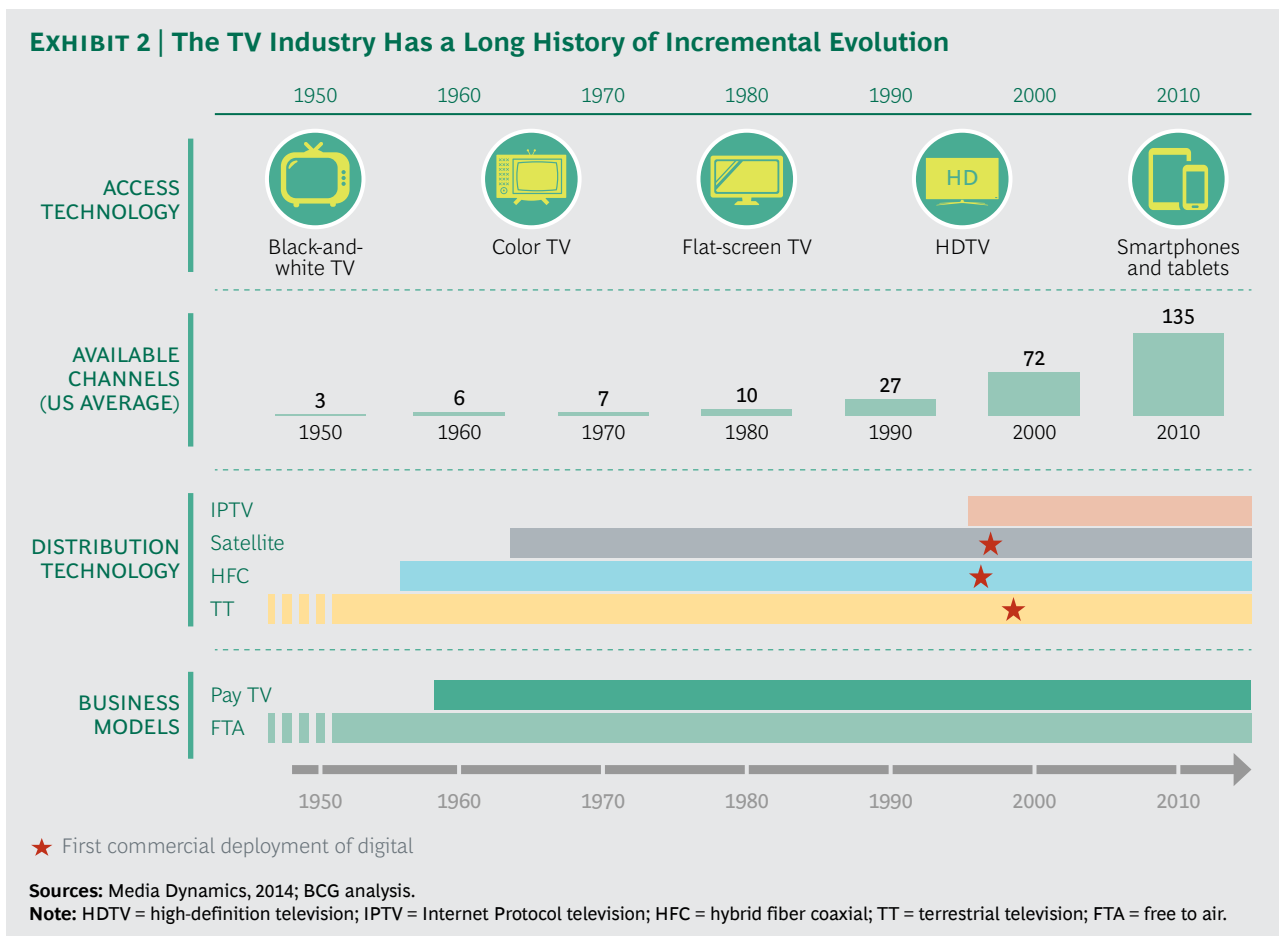


Disney, all hit near-52-week lows, raising fundamental questions: Which companies will emerge as victors in the digital age? Which business models will prevail? Will current industry leaders retain their winning positions, or will they crash and burn?

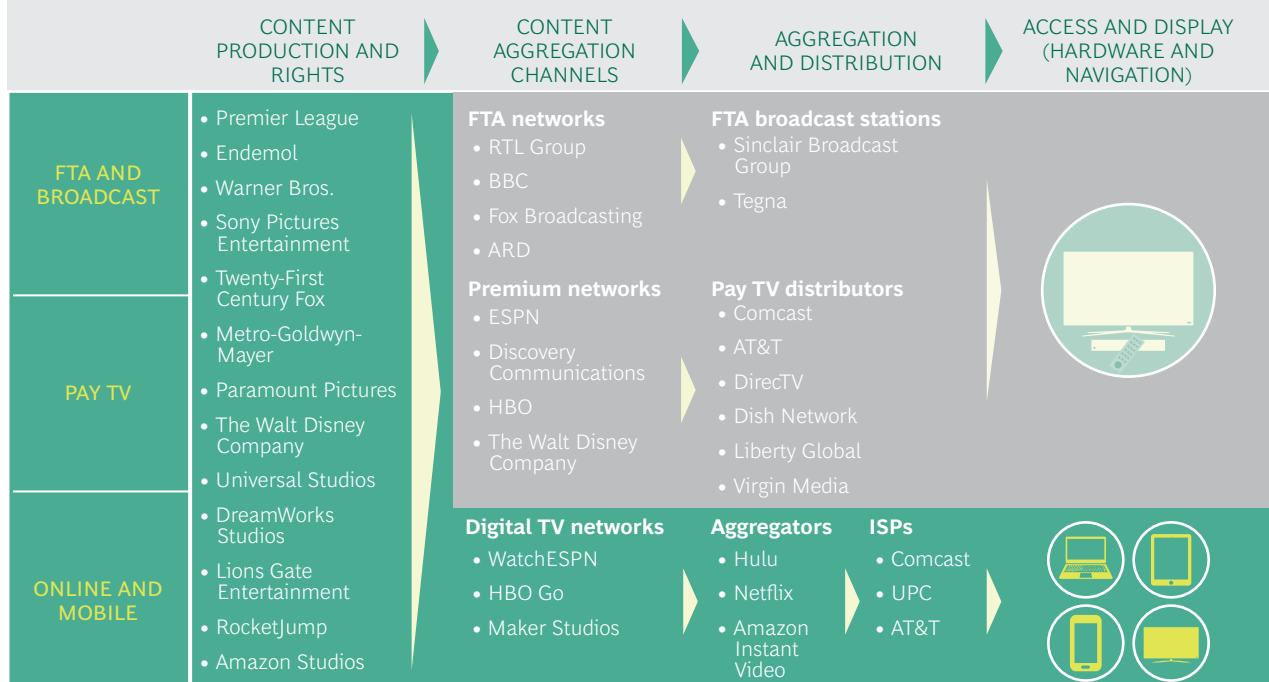
## The Key Enablers of the New Online Ecosystem

The television industry has a long history of incremental evolution: black-and-white gave way to color, big boxes slimmed into flat screens, 3 channels ballooned into 300, networks made room for cable and satellite, and now all three are making room for online and mobile platforms. (See Exhibit 2.) Each advance intensified competition among all the participants in the value chain. But even with all these changes, incumbents were able to coexist and, for the most part, thrive. And the core sources of value within the industry stayed the same. Content rights and production have always been the name of the game—and all relationships within the industry have revolved around this critical piece of the puzzle.

The greatest threat to traditional television as we know it comes from the emergence of new online and mobile pathways and the increasing cloud-based ability to provide on-demand, nonlinear services. (See Exhibit 3.) Although it's a simple, well-reported notion, it's worth recapping here. Streaming video completely bypass-



### EXHIBIT 3 | There Are Three Value Chains: FTA, Pay TV, and Emerging Online and Mobile



Source: BCG analysis.

Note: FTA = free to air; ISP = Internet service provider.

es the traditional video-aggregation and distribution models around free-to-air (FTA) broadcast networks, cable, and satellite—disrupting long-standing value chains and dedicated infrastructure (for example, broadcast towers, cable lines, and satellites) that have historically been critical to the television industry. The online and mobile ecosystem also changes how content reaches viewers, and on-demand viewing has made the fixed, mediated schedule of linear programming seem obsolete.

Until recently, changes in industry dynamics have been evolutionary rather than revolutionary. However, the new online ecosystem is threatening the roles and relationships among key companies in the ecosystem that up to this point have been consistent. It is instructive to understand the enablers of the new ecosystem before considering the future. Three overarching forces stand at the forefront:

- **Advances in Technology.** The robust fixed-broadband infrastructure that is needed to meet the demand for online video is now available in most countries. In North America, 85% of households are today ready for streaming, and projections say that 96% will be ready by 2017. Europe is following quickly with 74% projected by 2017. For users who are on the go, improvements in wireless connectivity have enabled greater access to digital content, and devices that can access mobile video have saturated the market. By 2017, the number of tablets and Internet-connected, or smart, TV sets will be nearly 1 billion worldwide. Streaming video has advanced to the point that it is now viewed as a direct threat to traditional TV.

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The abundance of high-quality online content has attracted consumers and encouraged the shift from linear viewing to on-demand, time-shifted viewing.

- **Increasing Availability of High-Quality Online Content.** Traditional studios have begun to invest in online productions, allowing viewers to access a wealth of excellent programming when and where they want it. Lions Gate Entertainment, for example, joined forces with Netflix, Hulu, and YouTube to create original series. In 2015, Lions Gate launched a subscription-based online-streaming service with Tribeca Enterprises. Disney acquired Maker Studios, a multichannel network that creates and distributes YouTube clips. FTA networks, such as CBS All Access, and premium channels, such as HBO and Showtime, have announced stand-alone streaming services. To make matters more interesting, global tech leaders are bringing disruptive models to the market. Amazon.com, Apple, and Google have all launched online-streaming devices to supplement their video-streaming services, and all three have commissioned original content as well. The abundance of high-quality online content has attracted consumers and encouraged the shift from linear viewing to on-demand, time-shifted viewing.
- **Development of New, Low-Cost Content-Production Models.** Digital studios and semipro content creators are challenging the belief that high-quality content must be expensive. Top-tier network entertainment programs can draw 10 million to 15 million viewers and cost up to \$5 million per episode, and top-tier cable shows—at up to \$3 million per episode—routinely draw millions of viewers. By comparison, the top YouTube channels have proved they can drive millions of views for \$30,000 to \$50,000 per episode. In some cases (for example, *Recipe Rehab* on CBS or *AwesomenessTV* on Nickelodeon), online productions have migrated to linear television. With low costs, and a growing ecosystem of digital aggregators, online and mobile content creators are challenging the long-held belief that producing hit entertainment content must be a very expensive proposition available only to those with deep pockets.

## The Disruptive Impact of the Online-Video Value Chain

The significant advances in technology and high quality of content available online have led to enormous increases in audience numbers and, as a further result, fundamental changes in industry dynamics. Market structures, relationships among companies, and distribution of value are all in flux. Viewers are gaining access to a massive amount of nonlinear online content, and, as a result, business models are shifting rapidly to capture value through these new channels.

As more and more consumers choose to watch streaming video rather than traditional TV, their appetite for serialized entertainment has grown, and industry companies have also scrambled to create or buy the rights to top-tier entertainment content. We have identified several core trends fueling the disruption.

**Online and mobile viewing will exceed facilities-based video viewing.** In the US, the amount of time people spent watching television shows on a television set dropped marginally (1%) from 2013 through 2014. However, an increasing amount of content is being delivered online, leaving video-only distributors (for example, satellite service providers) with an asset—facilities-based video distribution—that is quickly declining in relevance. Online viewership, on the other hand, is growing quickly. The amount of time people spent watching television shows online jumped 50%



from 2013 through 2014. By 2018, online video will likely account for nearly 80% of fixed-data traffic and close to 70% of mobile traffic.

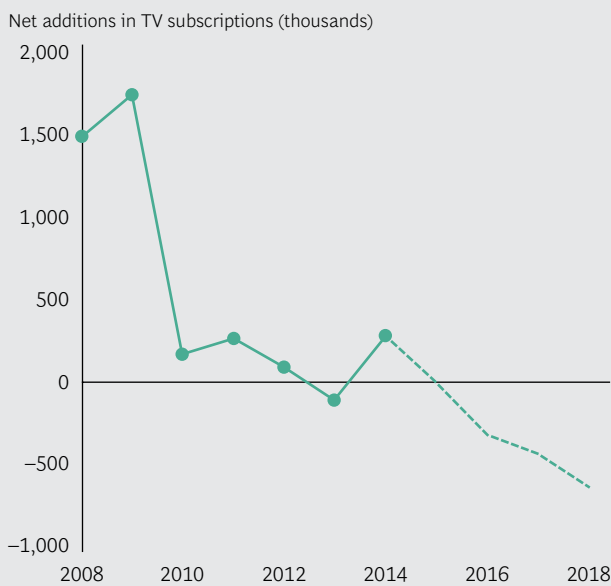
This rise of online and mobile viewing has had important implications for the traditional subscription-TV business. It has shaken the price-to-value relationship of the bundle, because less traditional viewing equals less value for the bundle. This has created an incentive for consumers to drop pay TV altogether (these are the “cutters”) or actively manage their cable bills downward (“thinners”). For many years, as consumers purchased more and larger video packages, average revenues per user rose. Now, however, consumers are disaggregating their video bundles. Our research suggests that the compounded effect of cord cutters, thinners, and “nevers” (people who never subscribe to cable) will not be just a few percentage points. Rather, it will be a few dozen percentage points. Nevertheless, we expect the decline to occur slowly over time—not unlike the drop in newspaper readership and magazine circulation and the demand for CDs. (See Exhibit 4.)

**On-demand viewing will exceed live, linear viewing.** The other fundamental shift in consumer behavior is the mass exodus of audiences away from live, linear viewing. The DVR, the first disruptive force, started driving this change more than 15 years ago, and now online and mobile-video-on-demand-only services have accelerated the shift. The model has clearly changed from “watching what is on” to “watching what I want, where and when I want it.”

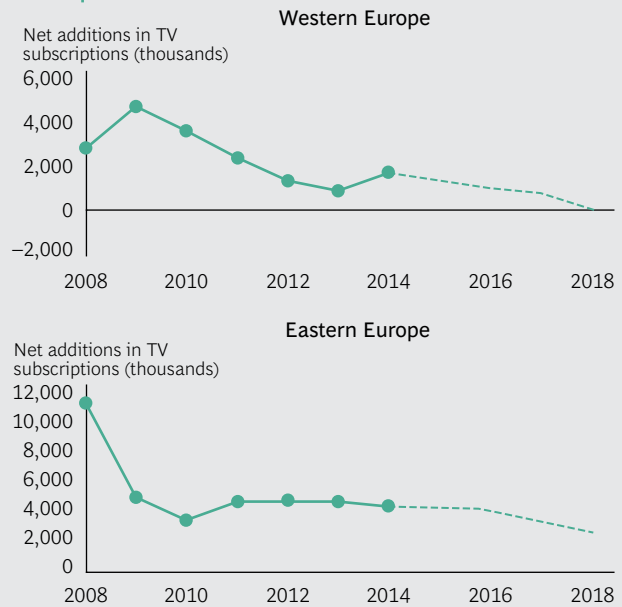
### EXHIBIT 4 | Growth in TV Subscriptions Is Expected to Slow or Decline in Mature Video Markets Worldwide



THE NUMBER OF TV SUBSCRIPTIONS HAS PLATEAUED AND IS EXPECTED TO DECREASE



GROWTH IN SUBSCRIPTIONS IS EXPECTED TO SLOW, AND THERE IS AN OBSERVABLE EAST-WEST DIVISION



Sources: Ovum; BCG analysis.  
 Note: The data for 2014 through 2018 is based on estimates.

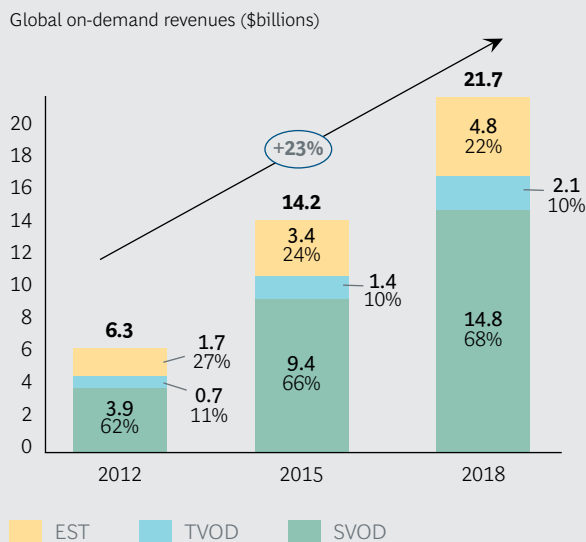
The share of nonlinear viewing is currently reported to be just over 20% in the US, but this number is expected to double to more than 40% by 2018. And many European markets are not far behind. These figures also massively understate the share of entertainment that viewers already watch in a time-shifted fashion. In the US and the UK, some 40% of serialized TV-show content is viewed in nonlinear formats. We are quickly approaching the point at which more entertainment programming will be viewed in nonlinear formats than live.

Not all video content follows this shift toward nonlinear viewing, of course. News, live sports events, and live blockbuster events (for example, the Grammy Awards and the Academy Awards) remain primarily live viewing experiences with a short shelf life. But entertainment is closing in on 50% of nonlive viewing, and live online streaming of major events is becoming commonplace. (We saw this in the first-ever free global live streaming of a National Football League [NFL] game between the Jacksonville Jaguars and the Buffalo Bills in the fall of 2015.) Linear programming for TV is already becoming an archaic medium.

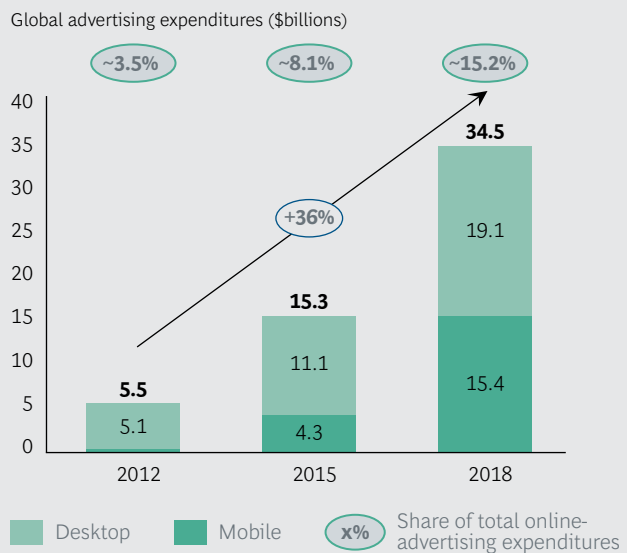
**New companies and business models are capturing value online.** The online and mobile ecosystem is structured around three business models: advertising-supported video on demand, which provides viewers with free access to a large library of video content supported by advertising revenues; transaction-based video on demand (TVOD), which allows consumers to own or rent content for a one-off fee; and subscription-based video on demand (SVOD), which allows consumers to access a large library of content for a monthly fee. For each of these models, the online economics are scaling up quickly. (See Exhibit 5.) In the US,

### EXHIBIT 5 | Online and Mobile Economics Are Scaling Up Quickly

ONLINE AND MOBILE REVENUES ARE EXPECTED TO GROW RAPIDLY, DOMINATED BY SVOD



ADVERTISING REVENUES ARE EXPECTED TO FOLLOW VIEWERS TO ONLINE AND MOBILE VIDEO



Sources: Magna; Ovum; BCG analysis.

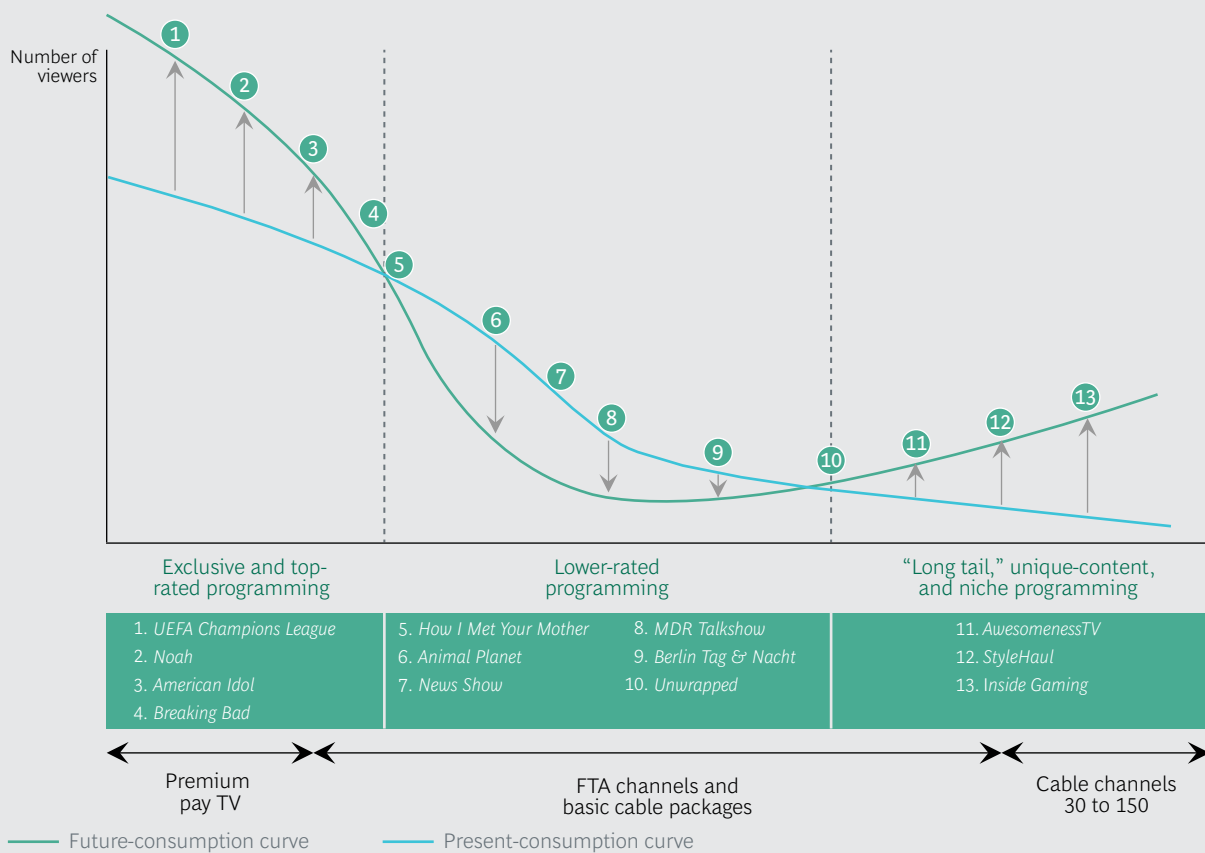
Note: SVOD = subscription-based video on demand; EST = electronic sell-through; TVOD = transaction-based video on demand. Because of rounding, not all numbers add up to the totals shown.

online-advertising revenues increased sevenfold from 2010 through 2015, and growth shows no signs of slowing down. Taking the global view, we expect TVOD and SVOD revenues to nearly double over the next four years.

Furthermore, advertising never keeps pace with changes in consumers' media-consumption patterns. This was true for the development of Internet display advertising, it was true during the early days of cable network programming, and it will be true for video streaming and nonlinear viewing. But that advertising will catch up is inevitable. We believe that the tipping point will occur when online media companies can replicate the time-sensitive reach that big-event TV networks can offer. Advertising technology is quickly advancing toward this endgame.

Networks are experiencing a collapse of the middle and a rise of the "long tail." Online, time-shifted video has altered the types of content that viewers consider valuable. Top-rated, unique content has become essential in the online and mobile ecosystem, and midtier programming is losing ground. (See Exhibit 6.) Viewership of such "water cooler programs" as the NFL's broadcast of the Super Bowl, AMC's

**EXHIBIT 6 | Top-Rated and Unique Content Is Becoming More Valuable, While Midtier Is Less Attractive**



Source: BCG analysis.  
 Note: FTA = free to air.

*Breaking Bad*, and NBC's *The Voice* has increased as second screens and parallel social media lead to greater engagement. Niche content shows—such as FX's *Louie*, Amazon Studios' *Transparent*, and the Food Network's *Chopped*—have passionate but small audiences, and nonlinear viewing provides them with increased access.

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In the past two years, companies as varied as Amazon, BBC, Microsoft, and YouTube have all commissioned original programming.

**Content creators and rights holders are capturing a greater share of value.** Content creators and rights holders are gradually gaining share—up from 33% in 2010 to 36% in 2014. Although these changes have been subtle on a global level, in mature video markets, such as the US and the UK, where competition for top-tier programming is robust, the trends are more pronounced. Naturally, media rights for top sports events have seen the biggest cost inflation, because they provide “exclusive” and predictable hit programming. In the UK, the costs for sports content nearly doubled from 2008 through 2013. The competition to create original series has also led to original programming's representing a larger share of total costs for traditional TV networks and online companies alike. In the past two years, companies as varied as Amazon, BBC, Microsoft, and YouTube have all commissioned original programming. A small percentage of these companies produce movies, but most are focused on serialized—scripted and unscripted—drama series, the leading drivers of nonlinear, online viewing. Netflix's licensing costs are projected to rise from \$2.3 billion in 2013 to \$3.8 billion in 2017.

## Where Is the Industry Headed?

Until recently, the video content industry's evolution has been gradual. Some consumers are canceling TV subscriptions, but most use online and mobile services in addition to, not instead of, their existing TV service. In response to the growth of online and mobile services—and consumers' preferences for nonlinear and streaming video—incumbents are gradually developing new offerings to compete.

Content creators, networks, and distributors have collaborated to deliver their traditional, facilities-based services over the Internet through “TV everywhere.” Cable and satellite operators are creating on-demand services, building navigation layers, and enabling consumers to view content on multiple devices. Networks are spending more for premium sports and entertainment content. The three video-on-demand business models—advertising supported, TVOD, and SVOD—continue to earn healthy returns.

In other words, while online-content networks and aggregators have assumed an increasingly important role in the value chain, many traditional content providers have made investments to stay in the game. And the symbiotic relationships among content creators, aggregators, and distributors remain largely intact.

It is surprising that a number of industry executives still believe that we will continue along the path of gradual evolution. To be fair, executives in the industry have spoken about ways to achieve this low-risk scenario: cutting off Netflix deals, aligning multiplatform rights and downstream syndication rights with multichannel-video-programming distributors' on-demand and TV-everywhere solutions (in exchange for higher rates, of course), and continuing down the evolutionary, struc-

tured, and safe path. Others in the industry, however, believe in the coming disruption, citing the strength of new participants, disruptive content models, and the shift of consumer demand from one-size-fits-all video solutions. We are in the second camp: industry shifts have been gradual thus far, but it is highly unlikely that the situation will not change.

We see four disruptive scenarios in the making, and who the winners will be will depend on which industry participants seize the advantage in the battle for market share. These scenarios are not mutually exclusive, and more than one may shape a given market. But this much we know: all participants whose businesses are built on traditional TV and streaming video do need clear strategies to prepare for the changes to come and—where possible—to influence outcomes in their favor.

**The universal remote: global, all-inclusive navigation solves the discovery problem.** As viewers embrace new ways to access video, they are challenged to find the specific content they want to watch. A wealth of compelling content exists in the fragmented mosaic of FTA programming, pay TV, and Internet-based offerings, but nobody has yet solved the discovery problem. That is, consumers can't access and stream all video content across pathways and devices using a single point of navigation. The business that can integrate these ecosystems and become the go-to, anytime-anywhere access point for living-room TV, smartphone, and tablet viewing will create a huge competitive advantage. Cable service providers with broadband infrastructure are especially well positioned to develop such global navigation. By partnering with or acquiring online providers (such as video-on-demand services) and gaining access to a broad set of online and nonlinear content rights, they can provide one-stop shopping for a comprehensive array of video programming.

**The walled garden: exclusive entertainment becomes the critical strategic asset.** Certain types of content, such as serialized dramas and top-tier sports events, are becoming increasingly popular with viewers, and distributors and aggregators can capitalize on this trend by locking up exclusive entertainment content. Large online aggregators such as Amazon and Netflix are already making big bets on exclusives—not just buying rights but also creating and distributing their own original series. Netflix's spending on original programming will skyrocket from \$5 million in 2012 to \$550 million in 2017. Cable providers, too, are locking up exclusive entertainment—especially top sports content. DirecTV paid for the rights to broadcast every out-of-market NFL game, and though the cost of purchase exceeds its direct revenues, the company won big with customer acquisition and retention. With subscribers choosing distributors on the basis of content preferences, exclusive entertainment content can be a critical strategic asset and differentiator in the competition among aggregators and distributors.

**Distribution disintermediation: direct-to-consumer takes on traditional TV bundles.** For networks with strong brands and top-tier programming—and for those that own the rights to hit content—the ability to reach consumers over the Internet opens the door to new monetization opportunities: networks that can deliver content directly to consumers. Networks don't have to share revenues with cable and satellite partners. Studios and sports leagues can reach fans directly, no longer

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Content creators and rights holders are well positioned to thrive in virtually all scenarios—evolutionary and disruptive.

relying on a TV bundle to carry their content. But when studios, networks, and other players go direct to consumers, without the benefit of the cable or satellite provider's customer base, they face a challenge: they must attract enough subscribers to make it profitable. And à la carte offers facilitate cord cutting, which means pricing must both woo subscribers and compensate for likely losses in traditional subscriptions. The prognosis for this scenario is related to how successfully content owners and networks tackle the challenge of attracting viewers without the benefit of traditional TV bundles. Although it might seem counterintuitive, brands will be more critical than ever in this scenario. TV networks with name recognition and top-rated sports and entertainment content will be the most likely to gain the requisite subscriber numbers and price points to succeed. If this scenario takes off, traditional TV-service providers could suffer, because successful direct-to-consumer offers enable TV networks and owners of content rights to leapfrog their traditional distribution partners.

**Live TV online: online players stream live water-cooler programming.** One of the main reasons viewers do not cut the cord is that traditional TV-service providers still offer live programming and content across all categories (not just entertainment, but news and sports as well). Online aggregators that can integrate live content with their own on-demand offerings—and price the package right—will transform their value proposition for consumers, in effect offering the advantages of traditional TV bundles combined with the advantages of a nonlinear online provider. A growing list of companies—for example, Sony, Dish Network, Zattoo, and Magine TV—already deliver live linear channels online, bypassing traditional cable and satellite providers. But the channel selection each of them provides is more limited than a traditional TV bundle. For this scenario to take hold, online companies need many networks and content owners to license them the rights to live linear programming, but these rights will not come easy—or cheap. What we are seeing now—online aggregators making content available faster and a growing number of companies delivering live TV over the Internet—makes this scenario one to watch.

## Staying Relevant in the New Ecosystem

The questions for all video industry companies are: What steps should we take—and when? What should we defend, and what should we actively disrupt? To thrive amid these changes, companies must determine how to make more strategic use of their content assets, seize the opportunities that can grow value, and tackle the challenges that can put their business models at risk.

**Content Creators and Rights Holders.** Content creators and rights holders are well positioned to thrive in virtually all scenarios—evolutionary and disruptive. Holders of sports rights have serious leverage to negotiate with aggregators and distributors, thanks to the unique value of their content. Entertainment content creators and owners, too, have excellent leverage across all scenarios, particularly with serialized dramas. Sports and entertainment content owners with strong brands and rich programming should consider direct-to-consumer opportunities, while those with less compelling brands can maximize value from “windowing” (selling and reselling video content through multiple distribution platforms at different prices over time,

in accord with viewer demand). Low-value content used to fill time slots will continue to lose ground in an increasingly nonlinear world.

**FTA and Subscription-TV Broadcast Networks.** Networks need to get out of the middle. For individual networks, this means building a strong lineup of top-tier or niche content. Few FTA networks have enough unique content to develop direct-to-consumer offerings. They should instead focus on disseminating their branded content as widely as possible through multiple distribution platforms. For them, online is the new spectrum. Pay TV networks with strong brands and compelling sports or entertainment content are well positioned to pursue direct-to-consumer offerings (in addition to their partnerships with infrastructure-based and digital-only aggregators). Pay TV networks with little or no top-tier or niche content, however, are poorly suited to thrive in the digital age. For both FTA and pay TV, the middle will be a certain path to decline.

**Infrastructure-Based Distributors.** Infrastructure-based distributors can be divided into two camps—those with a robust broadband capability and those without—and their optimal strategies are very different. Large pay-TV distributors with high-quality broadband should make aggressive moves to become the single point of navigation for all video content—across pathways and devices. This will require a significant change in the mindsets of distributors, whose business model has thrived on direct and proprietary relationships with subscribers. They will need to disrupt the walled garden to become an integrated curator of all video, including streaming-video content. The move will generate friction with key companies in the value chain, particularly networks and set-top-box providers, and regulatory issues may arise in certain markets. Nevertheless, large pay-TV distributors that have established strong relationships with consumers are well positioned to make this pivot. Small pay-TV distributors do not have the scale necessary to develop a comprehensive navigation platform for subscribers, so their best hope for survival is the gradual-evolution scenario. Video-only distributors are perhaps the most vulnerable should any of the disruptive scenarios come to pass. With little or no access to broadband, they are highly susceptible to cord cutting and thinning, and their margins are eroding as content costs eat up a growing share of video revenues. Given their endangered status, this cohort should either build or acquire broadband capabilities to supplement existing services, compete on exclusive content, or strategically align with broadband players.

**Online-Content Aggregators.** Online aggregators, such as Netflix, Hulu, and YouTube, must continue to leverage their advantages—broad distribution, unbundled access, and strong brand equity—to compete with incumbents. They should continue to invest in original content and leverage data to achieve a better hit rate. Online aggregators must also make a choice: to stay in their own lanes or attack. An online aggregator that stays in its own lane will protect its position and pursue an incremental share of the nonlinear online and mobile ecosystem. An attacker will license linear FTA and pay-TV channels to become a double threat, offering both linear and nonlinear programming. The right choice will vary depending on the digital aggregator's competitive and financial position, the pay-TV aggregator's penetration and strength in the market, and regulatory restrictions.

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**A**S COMPANIES MOVE deeper into the online and mobile landscape, their mindset should not be that they are making a transition from physical to digital. They will have to understand where the business provides unique value and build new business models that deliver on this value. This may well mean that some aspects of the business will contract and die, and it may mean that companies will actively cannibalize themselves. But online, mobile, and nonlinear viewing are here to stay, and companies that can successfully restructure their business models to keep pace with evolving viewer preferences have much to gain. And, if history is any indicator, the many that do not restructure their business models will face the consequences of value destruction.

*This report, the first in a series, takes a global view of the critical trends affecting the broader TV ecosystem. Next, we will detail the implications of this marketplace change for such major incumbents as FTA networks, cable TV networks, and the traditional distributors and aggregators of pay TV bundles. Subsequent reports will have a regional focus, the first of which will be the US market. It will also tackle the strategic choices of US industry participants as they prepare to maintain and create value in the new world order.*



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