2017 Report

The State of Streaming

You could be a contender: how streaming services can maintain a competitive edge

IBM **Cloud Video**

IBM

Overview

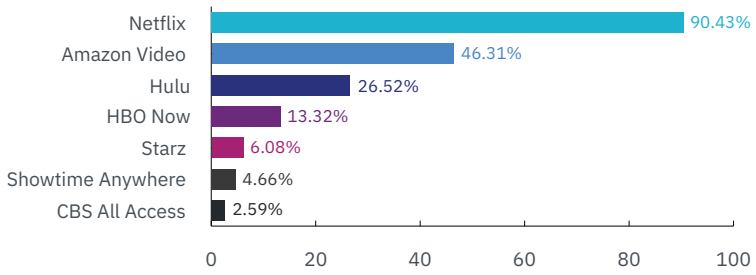
It's been ten years since Netflix introduced streaming video, and in the last three years it feels like a new service is launching every day. Since the initial rush to enter the space, streaming services are now tasked with solving emerging challenges and standing out in a crowded industry. Despite viewers' preference for streaming video on demand – roughly two-thirds of consumers currently use a streaming service – there are still major pain points that plague the viewer experience. In our annual report measuring the state of streaming among consumers, we've found that viewers have high expectations for their streaming services and are not completely satisfied with their experience. Now that the initial sprint to launch has passed, in order to survive in a saturated media landscape, streaming services must next tackle the myriad challenges that stand in the way of long-term success.

Intro

In our survey of more than 1000 US consumers, two-thirds of adults reported using a subscription video on demand (SVOD) service. As more streaming services enter the market, SVOD usage will only grow. Digital TV Research forecasts that over 70% of US TV households will subscribe to at least one SVOD by 2022.[1] With many options for viewers to choose from, differentiation will be imperative for video businesses who want to stay competitive.

Among SVOD users, consumers are subscribing to more streaming services than ever before. It is no surprise that Netflix continues to dominate the market with 90% of streaming service customers using the platform. Still, the popularity of other key players such as Amazon and Hulu has risen steadily over three years. HBO Now subscriptions have jumped from 2% of SVOD users subscribing in 2016 to 13% in 2017.

Which streaming video services do you use and/or subscribe to?



In a decade, streaming video has equaled cable's marketshare. Our report found that two-thirds of consumers still subscribe to cable – which is the same amount of consumers that use a streaming service. At the same time, there is distress in the industry as cable subs continue to drop. In Q3 of 2017 alone, roughly one million US consumers cut the cord.[2] Since 2015, subscriptions have dropped from 78% to 68%. Still, given that cable remains a significant player, it is clear that the media landscape is not a zero sum game; rather, with consumers' insatiable appetite for content, there's room for both SVODs and cable.

Meanwhile, digital consumption overall is on the rise. A third of consumers watch 1-2 hours a day of streaming video from YouTube videos to live streams to Netflix. With so much content readily available, media companies are under intense pressure to meet consumers' high expectations for premium, on-demand programming and a seamless viewer experience.

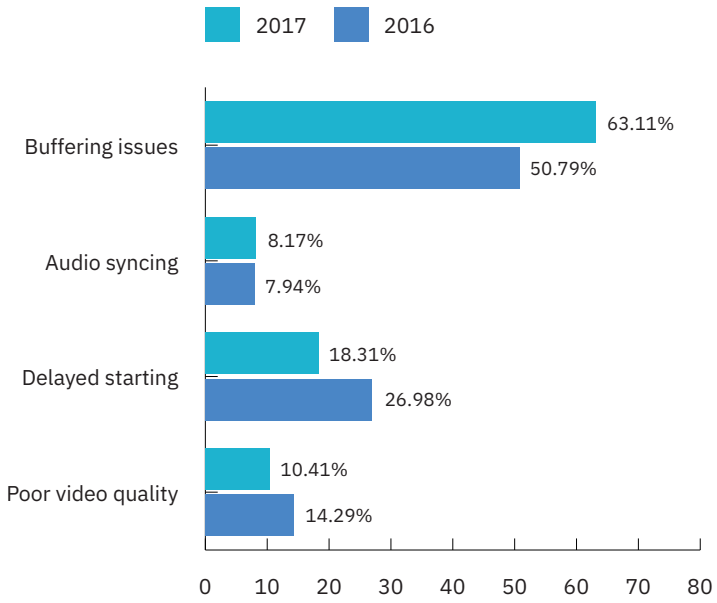
Key Findings

- Consumers are still frustrated by technical difficulties. Our 2016 consumer data report found that 75% of respondents experienced buffering or delayed start. This pain point has become even more prevalent – this year, 81% of consumers still experience these technological problems.
- The trend toward multiscreen viewing across devices has remained strong. Our consumer report found that half of respondents use connected TVs to stream video.
- Nearly two thirds of subscribers cite more content as number one on their wish list of changes to their streaming services. However, nearly half of consumers rarely or never want to watch programming recommended to them.
- It is challenging for streaming services with ad-supported models to satisfy viewers. Almost 60% of consumers said that video advertising takes away from their viewing experience, supporting last year's finding that ads are the number one reason for churn.

Houston, we have a problem: Three years later, and your video is still loading

Despite enhancements in the video streaming space, technical difficulties still plague consumers when they turn on their streaming services. A total of 81% of consumers experience buffering (a lag that disrupts playback while content is in-progress) or delayed video start (when a video takes significant time to initially load), according to this year's findings. This finding has actually increased from 75% of consumers in 2016. Alarmingly, almost half of the consumers polled would give up on the video they're trying to stream due to these problems. What's more, nearly 20% of consumers also experience poor video quality or problems with audio syncing.

Which of these technological problems have you encountered most often while using a streaming service?



Going Deeper

I don't think we're in Kansas anymore: Why certain regions experience technical difficulties differently

Within the US, a majority of consumers report buffering as their number one issue. While the percentage of consumers who experienced issues with buffering never dipped below 58%, specific regions experienced different levels of intensity. At its peak, respondents from the West North Central region experience the most issues with buffering (78.57), while responded from East North Central experience the least (58.14%). These regional results swap among the consumers who cite delayed start as the problem they encounter most often when using a streaming service. Respondents from the East North Central region experience this issue the most (24.42%), while respondents from West North Central (10.71%) experience this issue the least.

The difference in technical difficulties at the geographic level is partially due to inconsistencies among Content Delivery Networks – no CDN is 100% available in all regions, and CDN performance varies wildly from region to region. In a region where the CDN is not directly peered, the consumer experiences additional latency, which leads to buffering or poor video start times. In order to ensure a seamless streaming experience regardless of location, video businesses should harness a performance-based Multi-CDN strategy that takes advantage of the best performing CDN in every region. With this strategy, streaming services can dynamically route around any issues and harness the optimal CDN (at any given time, in any given region) to avoid streaming disruption.

These technical pain points among US consumers are part of a universal experience of frustration. Globally, consumers also want more from their mobile video streaming experience. According to a recent global study, 65% of respondents experience buffering problems, 62% experience delayed video start, and 57% experience video quality problems.[3] These pain points pose a significant risk to streaming services, as viewers make purchasing decisions based on the quality of their experience. Globally, 50% of consumers say they select video from OTT internet providers because of convenience and ease-of-use, while 44% cite the ability to watch whenever and wherever they want.[4]

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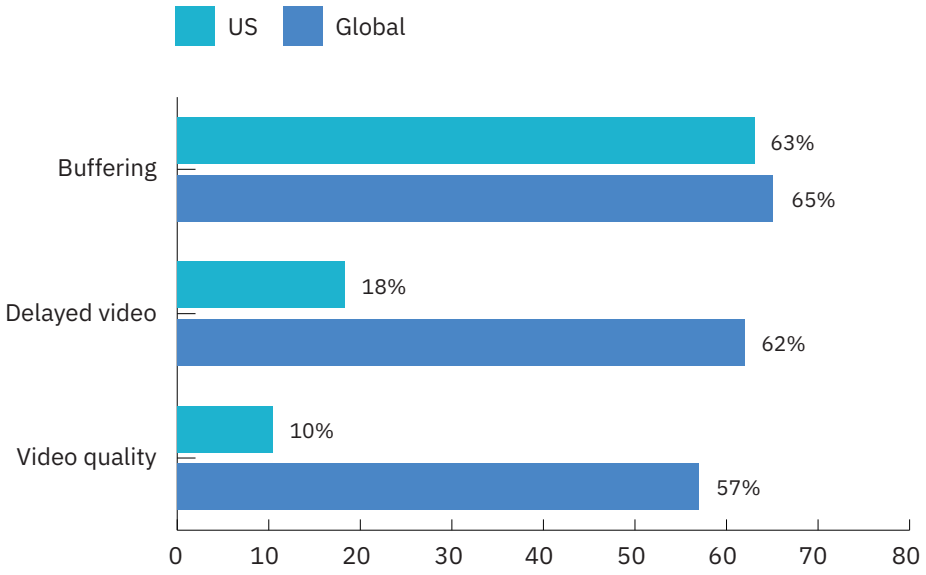


Going Deeper

To infinity & beyond: How to manage sudden spikes in viewership

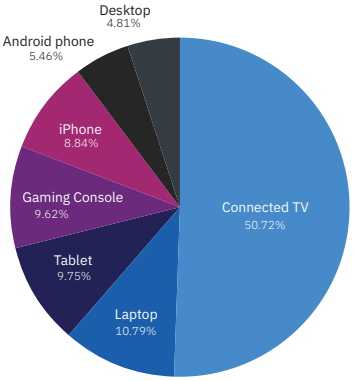
One contributor to these technical issues is sudden spikes in viewership. In order to meet consumers' expectations for flawless viewing experiences, streaming services must be able to anticipate and accommodate large upticks in audience numbers to reduce buffering and delayed start. When original series like Stranger Things or The Handmaid's Tale premiere on Netflix and Hulu, respectively, streaming services need to be ready to host the millions of viewers who are tuning in at the same time. Viewership for popular shows continues to skyrocket; for its latest Game of Thrones premiere, HBO recorded its highest number of concurrent viewers across the network's streaming services.[5]

In order to prevent subscriber churn, streaming services need to leverage technology that supports streaming and on-demand distribution across various platforms at top speeds. Without a scalable architecture that can handle massive spikes and facilitate high-velocity processing and delivery, streaming services will not be able to accommodate increased demand. As a result, streaming services could potentially lose customers due to a frustrating viewing experience, and risk tarnishing their reputation from a widely publicized outage.

Here's lookin' at you, Roku: Subscribers are in a committed relationship with a connected TV

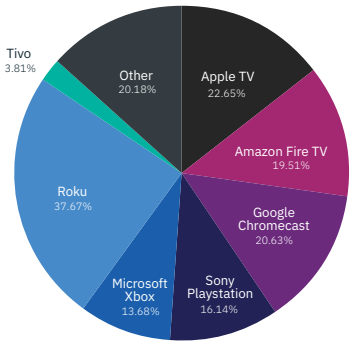
With the rise of online video, the definition of watching TV is changing, as it is no longer limited to simply watching network or cable programming. Today, consumers overwhelmingly prefer to access their streaming service through their connected televisions (such as a Samsung Smart TV, Roku, Apple TV, connected Blu-Ray player, etc.). Half of respondents use connected TVs most often to stream video, with the next most popular device being a laptop at 10%. This trend has persisted year over year, with 43% of 2016 respondents citing connected devices as the primary screen they use to watch SVOD content.

Which device do you use most often to access your streaming service?



Given that cross-device, multi-screen viewing has become integral to the SVOD experience, it follows that consumers with connected devices are loyal to their products. An overwhelming 93% of respondents would only purchase a new device if theirs was broken, or would never purchase a new one at all, if given the choice. Currently, Apple TV, Google Chromecast, and Amazon Fire TV, each attract roughly 20% of connected device users, with the potential for overlap among respondents given that check all that apply was an option. These brands trail behind Roku, which is by far the most popular, reaching 37% of users. With brands like Roku ruling the market, it is important for businesses to be at the forefront of new technology, so they can capitalize on consumers' strong loyalty to their devices early on. Even more important, streaming service providers need to be available across platforms - if their service is only accessible on one popular device, they'll lose out on those viewers refusing to switch to that option.

Which TV-connected device(s) or set-top box(es) do you currently use?



Going Deeper

There's no place like home: Are in-home audio assistants the key to video?

Streaming services need to meet consumers where they are, but that alone isn't enough. They also need to anticipate where consumers will be watching content next. Our consumer report found that 13% of consumers currently use one or more home-assistant devices. Given that these smart speakers are relatively new, it is likely that adoption will grow in the next few years. A recent eMarketer report found that voice-activated assistant device usage in the US has already jumped 129% in the past year.[6] And by 2020, 3.3% of global households will have adopted smart speakers like Amazon Echo and Google Home, according to a recent study by Gartner.[7]

We asked consumers what they want from in-home audio assistants, and here's what they said:

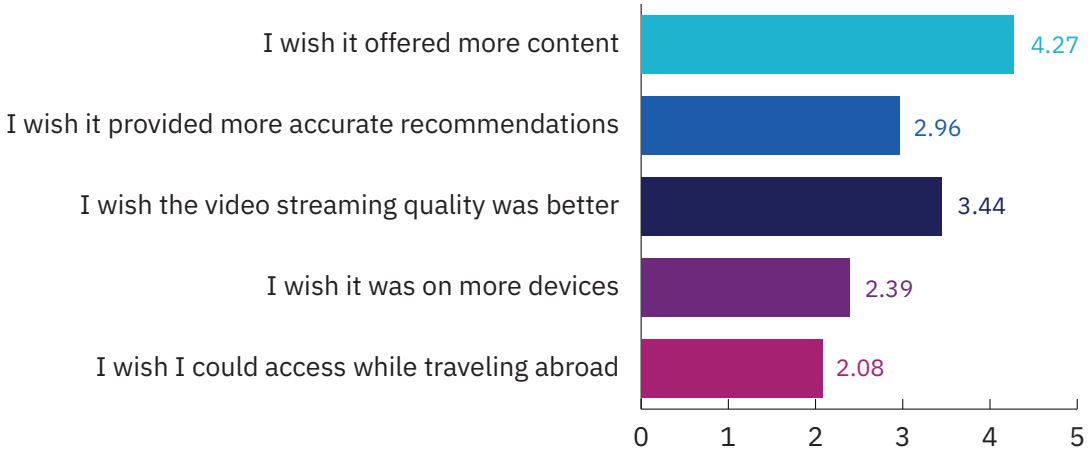
22% Voice search for specific scene in a video
6% Voice search for specific object or brand
19% Voice search for specific person
37% Device could recommend video content
16% Don't have streaming service subscription

In order to stay one step ahead of their competitors, streaming services need to anticipate the next wave of innovation and quickly integrate their platform with the latest technology in order to retain brand loyalty. Looking ahead, if streaming services hope to work with audio assistants, they need to optimize how they integrate with supplementary hardware in the trend's early stages. As evidenced by consumers' loyalty to their connected devices, streaming services must get it right from the beginning. By forming initial brand partnerships and integrating with smart speakers to the point where they can glean initial insights about how consumers are using those devices to access video, streaming services can then adapt their approach to better meet user needs. With those consumer habits in hand, streaming services will be able to pursue a more informed strategy to fully integrate their platform with smart speakers at scale – and retain a loyal customer-base.

Please sir, may I have some more?: Subscribers *still* can't get enough programming

If content is king, then consumers are clamoring for a bigger kingdom. Netflix reported hosting 4500+ films and 2400+ television shows in 2016; Hulu offered more than 10,000 titles.[8] However, this still isn't enough for subscribers - consumers want more content. In 2015, more than a third of consumers said their biggest frustration with their streaming service was the lack of content. Last year, one fifth of survey respondents said they'd even cancel their subscription due to this same frustration. And this year, almost two thirds of consumers said that the top change they'd make to their streaming service would be offering more content.

Which of the following would you be interested in changing about your streaming service?



Going Deeper

You're going to need a bigger boat: Streaming services need to ramp up their content offerings

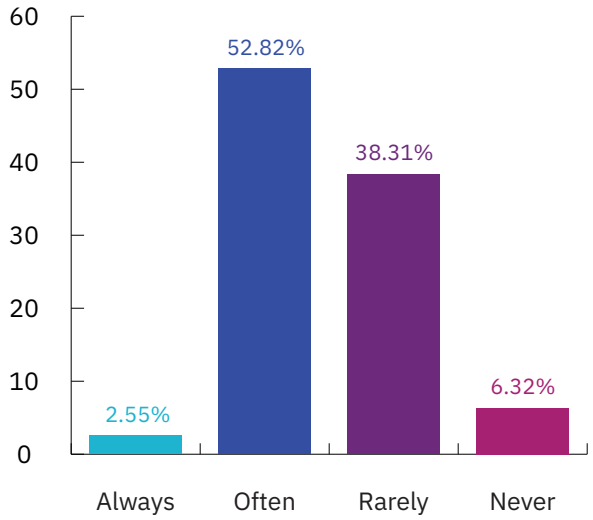
Streaming services already offer a deep breadth of content, but consumers aren't connecting with the available programming. Given that 61% of consumers engage in binge-watching, in order to meet consumers' demand for marathon viewing, streaming services need to offer binge-worthy content that viewers can't get enough of.[9] In a crowded landscape, it is not enough to only host a few popular shows; rather, every show needs to be a massive hit at least with part of your audience.

In order to optimize their content portfolio and maintain a competitive edge, content owners and service providers need to make highly informed decisions about the programming they create and acquire. But the reality is – most content owners don't have a deep understanding of their video library. AI technology is a valuable resource for understanding video, as it can mine rich and actionable insights. For instance, AI technology can pull rich metadata from current video content and analyze this data to reveal which story angles, characters, topics, and settings will resonate with future audiences. Armed with this knowledge, streaming services are empowered to acquire or create programming that is more likely to be a big hit, bolstering their content portfolio to become a must-have destination for content-hungry consumers.

Some like it hot: Consumers crave better content recommendations

Even if streaming services offer high-quality programming, it's useless if it doesn't reach its target audience. Streaming services must be able to serve the right content to the right viewer at the right time. Content recommendations are crucial to streaming services' ability to meet consumer demand for more relevant content, however the functionality is not yet where it needs to be. Our data report found that 44% of consumers say recommendations are rarely or never what they want to watch. Moreover, only 10% of consumers watch either most or all of the shows and movies recommended to them by a streaming service.

How often do your streaming service's recommendations accurately reflect what you want to watch?



Going Deeper

Make them an offer they can't refuse: Using AI to improve content recommendations

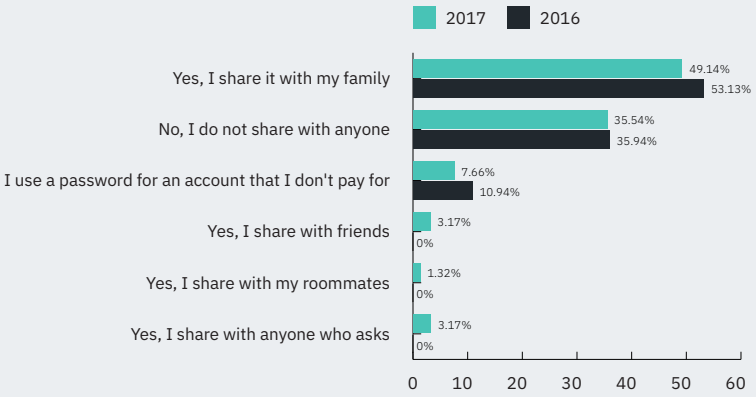
There is much room for improvement when it comes to offering subscribers a personalized viewing experience, as evidenced by the findings of our survey; but in order to make strides here, streaming services first need a comprehensive understanding of both their video library and consumer habits. By harnessing AI technology, streaming services can gain the real-time insights they need to optimize the viewer experience.

For instance, AI technology can quickly analyze consumers' viewing habits, and suggest content that aligns with users' previously liked shows, scenes, characters and beyond. It can also provide detailed analysis of a streaming service's video library, as well as mine biorhythmic data to understand factors like how time of day or current events can affect viewers' preferences. By comparing video data to viewing habits, AI technology can understand whether a viewer enjoys a particular show for its time period, strong female leads, or genre, and can leverage that data to recommend additional content that will resonate with the viewer. Taking all of these data points together, AI technology can help streaming services understand viewers' motivation behind selecting certain programming, and empower them to suggest similar content moving forward.

Turns out your sister's roommate's hairdresser actually doesn't have your Netflix password

Streaming service subscribers consistently don't share their passwords with anyone but their family. In 2017, our consumer report found that nearly half of streaming service subscribers only share their password with family. What's more, over one third of consumers don't share their passwords with anyone at all.

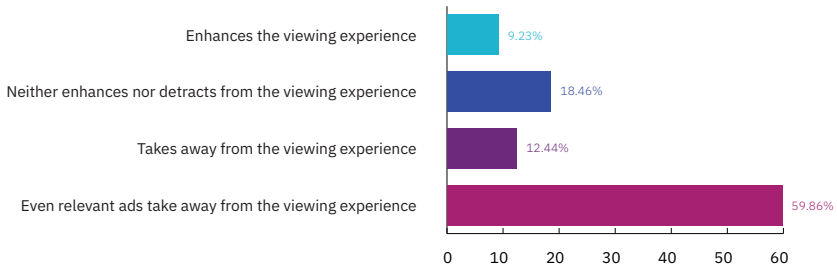
Do you share the password for the streaming service(s) that you pay for with anyone else?



You want the truth? You can't handle the truth: How consumers really feel about ads

Consumers hate ads - there's no way around that. Almost 60% of consumers polled this year said that video advertising takes away from their viewing experience. Last year, the top reason consumers would consider cancelling their streaming service subscription was due to an excess of ads.
What's more, a recent study from Hub found that consumers tend to embrace platforms that allow ad-skipping: nearly a third of respondents said they expect shows on a network's TV Everywhere app to be ad-free, and over a third of consumers cited the inability to skip ads in a TVE service as a dealbreaker.[10]

Which statement best summarizes your feelings about highly personalized video advertising?



Going Deeper

Could this be the beginning of a beautiful friendship?: Contextually relevant ads are the way forward for AVODs

It is clear that viewers are frustrated with advertisements. However, not every streaming service can afford to lose ads - or risk losing customers by pinning an "ad-free" charge to their subscription fee. Those video businesses need a new approach to ads that will not interfere with the consumer experience. In a world where everything is personalized, advertisers can no longer base their ad strategy around broad demographics. Instead, if they want to engage viewers, they must focus on placing ad content against programming that includes relevant topics.

Contextually relevant advertising is a key solution for advertisers hoping to better align marketing messages with the video content consumers actually want to watch. For example, during a female teen drama, streaming services could integrate ads from the restaurants or fashion brands featured in the episode, which would enhance the viewer experience by making the advertising and programming more cohesive. What's more, biorhythmic data about viewer preferences based on location and time of day can similarly inform what ad to place where and when. AI technology powers these monetization opportunities by automatically identifying complex content within a video and generating metadata from it to serve contextually relevant ad placements. Plus, it's a win-win, benefiting advertisers too: if consumers are happier with their ad experience, they will have a more positive association with those featured brands. With AI technology, streaming services can more strategically optimize their ad platform to enhance monetization and effectively engage viewers.

Conclusion

While a majority of consumers subscribe to streaming services, our report finds that consumers want more from their streaming services and cites multiple areas for improvement. Within today's saturated market, streaming services are challenged to retain subscribers, ensure seamless delivery, optimize the viewer experience across devices, acquire and create popular content, and monetize their offerings. It is essential for streaming services to not only alleviate these current pain points, but also anticipate the next wave of innovation and get ahead of the trend to keep pace with their competitors.

Following the initial SVOD boom, video businesses now need to focus on meeting and surpassing consumers' high expectations for their viewing experience and differentiating their offerings in order to compete in a crowded industry. By harnessing a scalable infrastructure and integrating with emerging technologies, streaming services can optimize the viewer experience. On the programming side, streaming services can upgrade their video libraries, improve content recommendations, and serve contextually relevant ads. Taken together, these solutions will empower streaming services to achieve long-term success and affinity among viewers.

About the Data

The online survey of 1,180 US adults was conducted in July 2017.

About the Unit

IBM Cloud Video enables leading brands to increase the value of their video with advanced products and solutions that simplify workflow management and streaming logistics. With cognitive and AI infused technologies, IBM Cloud Video empowers its customers to enhance monetization opportunities and maximize viewer engagement through unprecedented access to advanced data and analytics.

Endnotes

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