THE STREAMING DELUGE:

STREAMING HERE, THERE AND EVERYWHERE DISRUPTS MORE INDUSTRIES

CONTEXT & DYNAMICS

***Technology has opened the opportunity for individuals** and companies to stream the content **they have created**. Some of those content providers are highly paid professionals, such as Steven Spielberg, and many more are amateurs or influencers and commentators who create their own programs or channels on streaming networks. Streaming numbers are mounting for everyone and everything, from users to content providers and from streaming platforms to advertisers. The initial enablers are the data centers sprinkled around the world with tremendous storage and processing capabilities. These so-called cloud operations make it possible for nearly any device, especially mobile ones that lack massive processing power, to do things that require massive processing power. One of the beneficiaries of this technology is the entire streaming enterprise, from on-demand to live action. More critically, streaming, with its low barriers of entry, is forcing changes in the form content takes and in the places it can be accessed. As a result, the deluge of streaming and the spreading appeal of new forms of content have given a boost to mobile-devices-first media market.*

IMPLICATIONS

- *Legacy media that do not find a way to facilitate streaming will become less and less viable.*
- *With the increased number of competitors entering the field and only so many hours in the day, consolidation is likely to take place in the not-too-distant future.*
- *The Battle for Consumer Time represents a challenge to streaming's appeal.*
- *New kinds of celebrities and stars are likely to emerge from the streaming realm.*
- *Talent and content providers have tailwinds in the streaming environment.*
- *Streaming could offer a larger market for those struggling at the end of a long tail.*
- *Streaming gets applied to numerous industries, including retail, education and services, and changes the way they operate.*

INFERENTIAL FOCUS

BRIEFING

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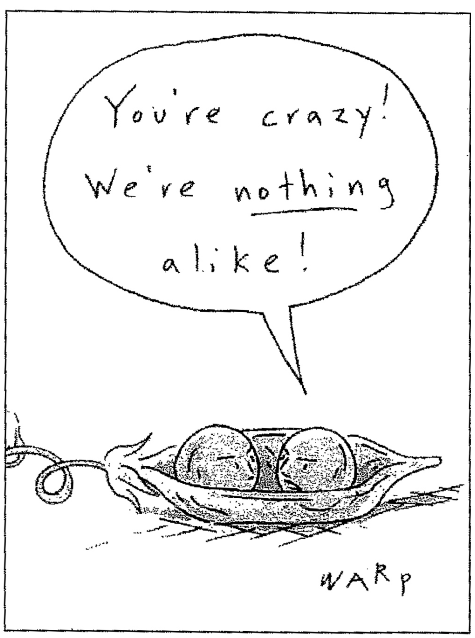
Numbers Tell the Tale

Streaming has momentum. Traditional media delivery services are on the defensive. Even some types of hardware, from game consoles to computers, are losing their hold on consumers' listening, playing and watching time. Sales of CDs are down, as are sales of video-game discs. In fact, sales of many entertainment products, including DVDs and game consoles, have declined, and stores that have featured such hard-goods products are suffering lost sales. Moreover, the number of households without any form of pay television has surpassed 40 million, and viewers paying for subscriptions to over-the-top (OTT) Internet-delivered video programming (*i.e.*, streaming content) reached 182.5 million, up nearly seven percent over the prior year. (*Guardian*, 8/11/19; *eMarketer*, 8/8/19)

Such disruptions and changes across a major industry have produced strange phenomena, captured by this fact:

◆ Sony, maker of the PlayStation game console, and Microsoft, maker of the Xbox console, announced they would be collaborating on development of a game- and media-streaming service based on Microsoft's Azure cloud-computing platform. (*Nikkei Asian Review,* 7/29/19)



What prompted such historically fierce competitors in the gaming market to turn to collaboration, thereby seemingly pausing their competitive history and looking to work together to capture a piece of the market they were already in?

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The simple answer is streaming. But a deeper look for answers might expand beyond that simple answer. Our observations suggest that the Sony-Microsoft competition-turned-collaboration is an outgrowth of changes brought about by new content delivery systems and how digitally trained consumers have responded to those systems that provide convenience, novelty, speed and access.

Three aspects of this streaming deluge need to be examined. First, technology produced the Data Centers as Platforms, which have led to Content as a Service. Second, On-Demand Streaming surfaced and Live-Streaming Services soon followed. Finally, Smartphone First for Media is starting to alter the device market.

Data Centers as Platforms Leads to Content as a Service

Large data centers have become platforms, enabling individuals to perform tasks and store data well beyond the capabilities of personal computers. Whereas they once bought a particular song or movie to play on their own device, or downloaded it to their own computer's database (limited by the size of their computer's memory), consumers now access the song or movie stored in a remote data center and play it without owning it or affecting their own storage capacity.

Data Centers as Platforms quickly led to a market for Content as a Service, which gave rise to popular services such as Pandora and Netflix, among many others. Recently, the owners of the data centers turned to the Content as a Service model, as suggested by recent announcements in the online gaming market.

◆ Google, which operates data centers in roughly 200 countries and territories, announced Stadia, a gaming platform with monthly subscription fees of less than $10.

◆ Amazon is looking into offering a cloud-based gaming service with a monthly subscription fee.

◆ Tencent Holdings, Baidu and Alibaba, all of which have substantial cloud computing centers, have announced online gaming markets.

◆ Apple, which pays Amazon Web Services roughly $30 million to provide massive data storage, announced Apple Arcade, which, for a monthly fee, grants customers access to more than 100 new and high-end gaming titles. Apple already has a music subscription service.
(*Nikkei Asian Review*, 7/29/19; *Hi-Tech Chronicle*, 1/11/19; *Verge,* 4/22/19)

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These kinds of actions are the reasons Sony and Microsoft have initiated joint research and development: their console businesses are getting disrupted by faster, cheaper and more accessible alternatives.

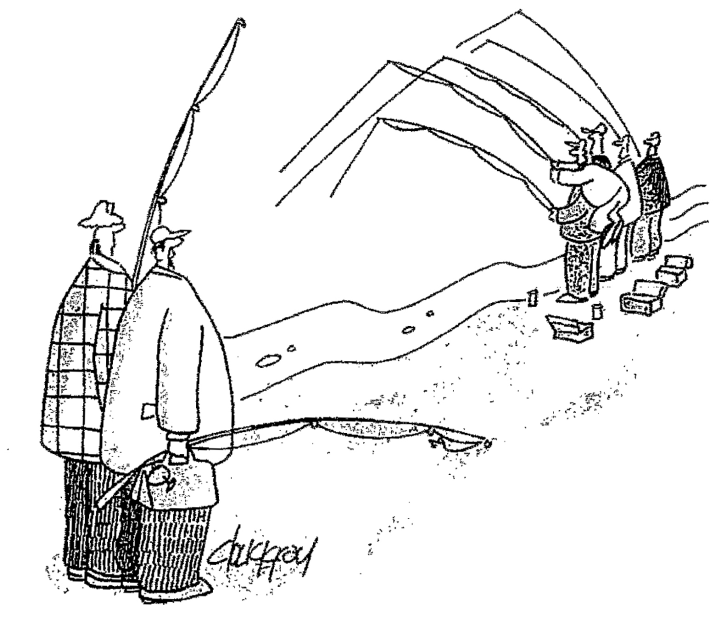
Streaming—On-Demand and Live

Large databases stored in remote data centers have made access to wide-ranging pieces of content relatively easy to anyone willing to pay a fee. Such subscription services have steadily displaced downloading services, as well as pushing aside content delivered via compact discs (CDs) and digital video displays (DVDs). Video sites such as YouTube, Vimeo, Crackle, Archive, Metacafe and others have attracted viewers with their finished professional works as well as their funky amateur videos. Meanwhile, audio subscription sites such as Audio, TuneIn, Kobo, Scribd and others enable listeners to access their vast databases of audiobooks, while Spotify, Deezer, Apple Music, Pandora, Prime Music and others enable listeners to access those sites' massive music libraries, all of which operate on monthly subscription fees.

Lately, podcasts have proven more and more attractive. Entercom, one of the largest traditional radio companies, bought Pineapple Street Media and Cadence13, two popular podcast sites. Spotify, the popular streaming-music site, bought several podcasts, including Gimlet Media and Anchor, while iHeartMedia bought Stuff Media. (*Nielsen Lab*, 8/7/19)

These kinds of activities highlight the rise of streaming as not merely a competitor to existing media distribution systems, but rather as a replacement for them.

◆ As of 2018, streaming accounted for 75 percent of the music industry's entire revenue stream. (*Ringer,* 6/27/19)



"That looks like a good spot."

The rush to get involved with streaming culture has been gathering scope and converting the arms-crossed holdouts. For instance, Taylor Swift, the extremely successful singer-songwriter and artist who had vehemently criticized streaming sites and had kept her albums away from those sites during the first weeks of release, let her latest album, *Lover*, go straight to streaming. Moreover, the album includes 18 songs, mostly because history has shown that albums with more songs (and with shorter songs) get the widest play on streaming sites. Thus, Swift, the one-time streaming sceptic, by adding streaming access to her albums and songs and by actually redesigning her albums and songs to fit more comfortably into the streaming format, has gone all in. (*Popcravenews,* 8/19/19)

Swift is not alone. Ed Sheeran enticed leading singers and musicians from country music, rap, hip-hop, rhythm-and-blues and pop to collaborate on songs for his latest album, *No. 6 Collaborations Project*. Because of so many different well-known artists from so many different styles, Sheeran's album landed on 800 different playlists. (*Billboard*, 7/18/19)

Another way in which streaming is affecting artists and the way they distribute their work involves pressure to stay in the flow – actually the overflow – of new content. Some artists, including popular stars such as Ariana Grande and Lana Del Ray as well as bands such as Foals and The 1975, have released several new albums in less than a year.

Tik-Tok, originally named musical.ly until it was purchased by the Chinese company ByteDance, is changing the way musical stars and popular music are discovered and made popular. What draws attention are the so-called Challenges, which call on viewers to perform some task, such as "eating to a beat," or to hit a dance move called "the woah" and post it. Nearly all challenges involve music, and this is where Tik-Tok has started to replace A&R professionals. The service is launching musical careers, such as Lil Nas X and his broad-based hit song "Old Town Road." (*Ringer,* 6/27/19)

> Live-streaming interactive shopping sprees surfaced on Alibaba's Taobao Marketplace, with an influencer entering stores holding up items and asking if any viewer would like to purchase them.

While on-demand streaming spreads into more and more fields meeting the tastes and desires of more and more people, live streaming – that is, the "broadcasting" online of live, real-world activities – has become a critical component of streaming's appeal.

◆ This past year, live streaming captured 2.7 billion hours of viewership at Twitch, the site bought five years ago by Amazon for $1 billion. Meanwhile, YouTube captured viewer eyes for another 735 million hours, and Facebook Gaming attracted 200 million hours to its live stream. (*New York Times*, 9/27/19)

Twitch, which has often mistakenly been labeled a gaming site, has launched a marketing campaign to reveal that it is a widespread streaming site, not just a gaming site. While they have been popular streaming video-game competitions as well as watching highly skilled gamers play their games, the site also features many more live-streamed programs. After all, explained Sara Clemens, Twitch's chief operating officer, "Where gamers go, everyone else follows." (*Economic Times,* 1/12/19)

◆ Twitch has deals with the National Basketball Association and the National Football League as well as deals with wrestling associations and women's hockey to live stream games and competitions.

◆ In February, the French government, as part of its ongoing series called the Great National Debate, streamed 11 hours of public discussions on Twitch.

◆ Twitch added channels to promote cooking fitness, general fitness and talk shows.

(*New York Times*, 9/27/19; *Fast Company, 4*/19)

Streaming Reaches New Industries

Streaming is creating its own environment, forging new ways of generating content, displacing broadcast television as a source for live-streamed events, and spreading its appeal across wide areas of the on-demand market. In short, streaming is going to upset more industries, as it has already done to music, video and gaming.

Retail – Live streaming interactive shopping sprees surfaced on Alibaba's Taobao Marketplace, with an influencer entering stores holding up items and asking if any viewer would like to purchase them. In 2018, Marketplace sold $4.4 billion worth of goods this way, which caught Amazon's attention, and the U.S. company launched an Amazon Live Creator app to facilitate live-streamed shopping. Both Facebook and Instagram are now developing such capabilities. Startup Dote features 15-minute streamed shopping sprees called Shopping Party, which provides followers access to 150 retailers, such as Asos and Brandy Melville, stores that are popular with Generation-stores, each of whom holds up items to enable Chinese consumers back on the mainland to buy them. Some American retailers have actually opened early to enable ShopShop programs to stream live to China at 9 p.m. (*Glossy*, 4/9/19; *Wall Street Journal*, 5/8/19)

Fitness – Peloton has made on-demand fitness streaming more popular, by streaming to their exercise cycles videos that feature well-known fitness personalities to inspire users to work harder. It has become so popular that Soul Cycle, part of the Equinox Group, said it would produce its own cycle with streaming access to workout celebrities. Meanwhile, Hydrow, which offers indoor rowing machines, is starting up live streams from Boston's Charles River and from the inland waterways next to Miami. At the same time, Tonal, which sells weight-lifting equipment, now offers a streaming guided workout. (*Fast Company*, 9/7/19; *Verge*, 7/18/19)

Musicals – BroadwayHD exploits streaming capabilities to give viewers access to Broadway-style musical productions from around the world. For a monthly fee, users can access 300 different shows, amounting to 700 hours of on-demand entertainment. (*Washington Post*, 6/7/19)

Funeral Services – Funeral homes are now offering live-streamed funerals for those unable to attend the actual event. Roughly 20 percent of all funeral facilities across the U.S. now offer such a service to families. One streaming company, One Room, started its service focused on birthday parties and corporate events, but recently turned to funerals, eventually dropping those earlier, other types of services because of demand for the bereavement service. (*CBS*, 8/15/19)

Smartphone First for Media

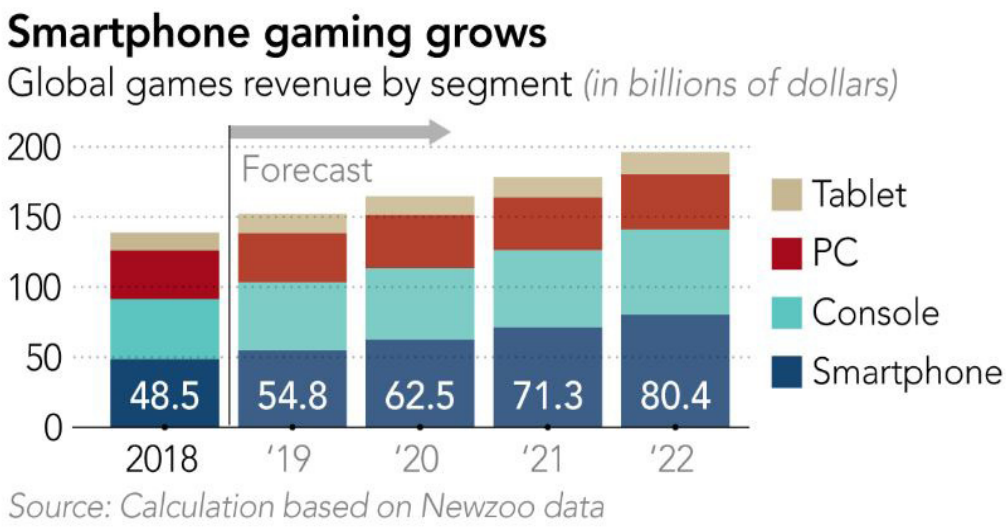
On-demand and live streaming are slowly displacing existing media as the preferred manner of accessing content. And accessing such content whenever and wherever one wants, means that more and more streamed content is getting delivered to mobile devices. The number of hours spent viewing streamed content on connected televisions among U.S. consumers increased 145 percent, while streamed content viewed via mobile devices, at the same time, increased a sizable 109 percent.

The mobile market is where most consumers spend the most time. For instance, mobile-games players already comprise more than half of the video-game market and mobile games are the fastest growing segment of the industry. (*TV Technology*, 8/7/19; *Nikkei Asian Review*, 7/29/19)

Thus, focusing on streaming to a mobile device is getting content to consumers where they are, as the wild success of Tik-Tok suggests. A recent example reveals the industry turning to the smartphone as the best way to attract consumer attention.

◆ Video-streaming startup Quibi is a mobile-only platform that focuses on highly produced 10-minute stories. The company, headed by Meg Whitman, of eBay fame, and started by Jeffrey Katzenberg, of Disney and DreamWorks, focuses on short bursts of content to attract young viewers. Steven Spielberg is writing and directing *After Dark*, a series that will be broadcast…after dark… in 7-to-10-minute installments. NBC News will produce twice-daily news updates, and other short programs are in production. (*Hollywood Reporter*, 7/30/19)

Not only is streaming pushing artists to create new forms of content and producers to structure different kinds of distribution formats, it is also moving various industries to produce content for the smartphone-first media market, as in the gaming industry.

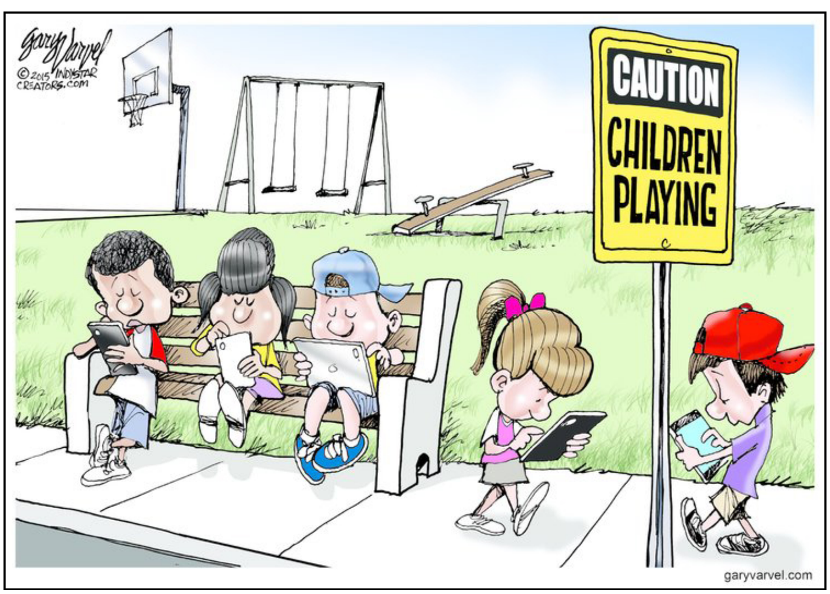


Brands are looking closer at placing ads on streaming sites, which according to marketers at Birchbox, an online subscription product company, can provide more targeted messages because each streaming channel or site appeals to a narrower demographic than standard television stations, and, in addition, it offers a better cost-per-thousand viewers than traditional television. Better targeting and a higher level of effectiveness are attractive to advertisers, and that is helping streaming sites. Hulu's ad revenues, for example, increased by 45 percent in 2018, compared to a year earlier, and this year, it tripled its sales force dedicated to brands. Also, Hulu recently announced a feature which places an ad on a screen whenever a viewer pauses a program. Meanwhile, revenues from ads placed in podcasts have increased from just short of $170 million in 2016 to just short of $480 million in 2018. (*Adweek*, 8/19/19)

Streaming has momentum. It has a rapidly expanding audience base; has more competitors entering the market because of the expanding audience base; has low barriers to entry while also facilitating high-cost productions; has created a developing interest in content providers; and has started to attract advertisers interested in its targeted market capabilities. Older technologies are getting shunted aside by this new focus on streaming, and even recent technologies might find themselves falling behind their competitors looking to lure the young demographic that finds streaming's speed, interactivity, novelty and ease of access much to their liking.

More Competitors, More Customers...Cue the Advertisers

Concentrations of young people accessing streaming shopping, gaming sites continuing to attract viewers to streaming competitions, more and more people watching and listening to short bursts of streamed content – all have started to catch advertisers' attention. Even though subscription services receive monthly fees from customers, advertising is a welcome complement to that revenue. For example, Quibi will charge $5 per month for those who will accept ads, which will run six to fifteen seconds, but it will also offer ad-free streaming for $8 per month. (*Hollywood Reporter*, 7/30/19)



Some of our previous looks at this topic:

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