Cablefax Daily...

WHAT THE INDUSTRY READS FIRST

Delay of Game: Combatting Streaming Latency Gaps

Viewers watching a live event want to feel as close to the action as possible, as if they're actually sitting in the stands. With cable, the lag time behind the actual real-time event was around six seconds and the discrepancy from viewer to viewer wasn't significant. As over-the-top streaming services rise and consumers watch major events like the Super Bowl on vMVPDs, a new issue has risen: streaming latency. Delays in the digital delivery of the same content can create a mismatched experience from one viewer to another, creating the opportunity for a final score to be spoiled by an alert on one's phone or a text from a friend.

Firstlight Media has a front row seat to the challenges of matching a stream of an event with its live cousin on cable. When a broadcast starts, Firstlight takes that video and transcodes it, converting it for file-based distribution. This is where a small amount of latency is added, but not much. Then there are protocols—either HLS or Dash—that allows one to distribute over the internet. The protocols break down the video signal into smaller files so they can be dispersed using the internet infrastructure. Martin says HLS, which works with Apple's device family, protects quality over latency, while Dash supports Android devices for the most part and has fewer buffering requirements.

Where latency starts to make a larger impact is after those bits of video signals. Those files get assembled back to a

continuous file for the video player. This is based on network characteristics such as what resolution the viewer chooses or available bandwidth, but because of the uncertainties that come with network connection, a buffer time is added.

"The main reason for latency, if you think about digital distribution, is the fact that you're distributing over the internet, which is an unmanaged network. And you have to account for the variability of network bandwidth as it changes over time," Firstlight CTO *Juan Martin* said. "When you are delivering over a cable or a managed network, you have full control of the distribution path, the bandwidth, availability ... You can predict better how much time it's going to take you to distribute over cable."

After factoring in all internet elements, the viewer sees the content they've been waiting for. Martin said today, latency time for cable amounts to the six or seven-second range. For streaming, it's normally 15-20 seconds, but that can grow to around 50 seconds with an inconsistent connection. This creates drift, where viewers of the same content or event will see it at different times. That's where **Phenix** steps in. The company, among other things, conducts reports comparing the lag time of various sources with real-time events, finding that some like **YouTube TV**, **Peacock** and **FuboTV** were 52.3, 54 and 55.1 seconds behind the 2022 Super Bowl, respectively.

"If you're watching and you're interacting with each other, and you're not watching at the same time, then you almost have to kind of put your phone down and put it away," Phenix





CMO *Jed Corenthal* said. "Because if you don't, the game that you're watching may be ruined for you because you've seen something."

The issue has only become more complicated with the rise in sports betting, particularly in-game betting. Pre-game bets close at the start of the contest, but in-game options pop up throughout the duration of the game. If a person's stream is behind, there is a chance they'd be unable to place a bet. Corenthal said problems like this could make sportsbooks like **DraftKings** or **FanDuel** consider entering the fray for sports media rights.

"What we believe sportsbooks are going to start to do—and we're starting to see it already—is that they're starting to stream video content on the app itself," he said. "Ultimately, you will go from a bet-and-watch experience where you go on the app and you make your bet, and then you go watch the game ... To where you can watch the game and bet on the game in the same application."

As for how to reduce streaming latency, the jury is still out. Some delay is added for quality assurance, but for file compression, transfer and reconstruction, it's based on the mercy of internet connection and the technological process. "Short-term, we're going to be, I think, gradually migrating to chunk-based transfer. So, for low latency reduction, or like the latest HLS, it's going to be better than broadcast and good enough," Martin said.

NSR NOT WORRIED ABOUT DISH DEADLINE

The **FCC**'s Wireless Telecommunications Bureau turned heads two weeks ago when it opened a docket to monitor **DISH**'s

compliance with conditions tied to the **T-Mobile/Sprint** merger and its wireless network launch. But New Street Research doesn't think that necessarily means investors should be worried about potential consequences for the operator. The most immediate concern coming up is the condition requiring DISH to build out a network reaching at least 20% of the U.S. population by June 14. If there is a challenge, it will be in ensuring Voice over 5G (VoNR) service runs smoothly at that point, but DISH can rely on its MVNOs to ease that pain. Investors have also been concerned because FCC Chair Jessica Rosenworcel voted against the T-Mobile/Sprint merger involving DISH during the last administration. Would she use this as an opportunity to penalize because she wasn't a fan of the deal in the first place? "Any material penalty against DISH now increases the odds of only three players offering wireless services, the opposite of what Rosenworcel wants," New Street said in a weekend note. "Second, she has already expressed a view that the deal struck by her predecessor had loopholes. So here, she can justify a benign treatment of DISH on the grounds that it is mandated by the flawed Republican conditions that she is obligated to honor as the legal framework for compliance." T-Mobile beat DISH to the 5G voice jump Friday, launching commercial VoNR service for customers with Samsung Galaxy S21 5G smartphones in limited areas of Portland, Oregon, and Salt Lake City. T-Mobile told customers in those areas that they should expect less of a delay in the time between when they dial a number and when their phone starts ringing. The more exciting prospects for the technology will come in the future when it allows T-Mobile to perform network slicing that



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relies on a continuous connection to a 5G core. The operator said it will enable VoNR in many additional locations this year, but didn't offer any further details.

FI RIGHTS BATTLE BEGINS WITH CABLE, STREAMERS

The race is heating up for Formula 1 television rights, and multiple digital competitors are hoping to cross the finish line in first position. **NBCUniversal**, **Amazon** and **Netflix** are competing against current rightsholder **ESPN** for coverage starting in 2023, according to a weekend report from *Business Insider*. The existing rights deal reportedly sits at \$5 million/year, but a rise in the sport's popularity has skyrocketed the value of the television rights. Through the first five races of the 2022 season, F1 averaged 1.4 million viewers per race. According to ESPN, that was a 49% increase over the 2021 average. That boost has F1 owner **Liberty Media** requesting \$100 million/year for the rights.

SOHN ALLY CALLS FOR VOTE

More of **FCC** nominee *Gigi Sohn*'s allies are coming out and calling for movement on her confirmation. **Common Cause** is the latest to speak out, saying the clock is running out not just for Sohn, but for the opportunity to have a full Commission under President *Joe Biden*. In a statement published Friday, the organization pushed Senate Majority Leader *Chuck Schumer* (D-NY) to hold a vote on her nomination. "Given the current time constraints, it would be incredibly difficult if not impossible for the White House to identify, vet, nominate, and for the Senate to ultimately confirm another nominee if Ms. Sohn is not confirmed," Common Cause Special Advisor *Michael Copps*, a former FCC commissioner, said. "If we want to break the deadlock and have an FCC that can fully address the communications needs of our households during this administration, it's Ms. Sohn or bust."

MUSK THREATENS WALKING AWAY FROM TWITTER

Elon Musk is threatening to step back from his deal to buy **Twitter** if the social media company does not provide him with specific information on the spam and fake accounts that live on the platform. In a letter sent from his lawyers to Twitter legal head Vijaya Gadde, Musk's team said that he believes the company is "actively resisting and thwarting his information rights" under the merger agreement. Therefore, he reserves his right to terminate the merger agreement. "Twitter's latest offer to simply provide additional details regarding the company's own testing methodologies, whether through written materials or verbal explanations, is tantamount to refusing Mr. Musk's data requests," the letter states. "Twitter's effort to characterize it otherwise is merely an attempt to obfuscate and confuse the issue. Mr. Musk has made it clear that he does not believe the company's lax testing methodologies are adequate so he must conduct his own analysis. The data he has requested is necessary to do so."

AT&T WRAPS XANDR SALE

AT&T completed its sale of programmatic ad division **Xandr** to **Microsoft** Monday. The deal, which was announced in De-

cember, does not include the advertising sales division that supports **DirecTV**. Microsoft hopes the digital ad solutions from Xandr will give it and its partners improved activation and advertising results and better monetization opportunities for publishers.

COMSCORE ADDS CTV METRIC IN EUROPE

Media measurement firm **Comscore** is adding connected TV measurement to its Video Metrix Multi-Platform product for Spain, the U.K. and Italy in June and France and Germany in July. This allows Comscore to provide complete audience measurement across YouTube's largest device platforms like PCs, mobile phones and CTVs. Buy-side clients can now use Comscore's solution to account for CTV viewing and gives advertisers full-cycle enablement for planning and measurement of their YouTube ad strategy. The CTV measurement will expand into markets across Asia and Latin America over the next several months.

FCC, CANADA SHAKE HANDS ON ROBOCALLS

FCC Chair Jessica Rosenworcel signed a Memorandum of Understanding with the **Canadian Radio-television and Telecommunications Commission** Chair/CEO *Ian Scott* tied to combating robocalls Monday. "Robocall scams are an international problem," Rosenworcel said in a statement. "And we know that many of these calls cross international borders before entering domestic phone networks."

VISIONARY WINS GTCR FUNDS

Wyoming-based **Visionary Broadband** announced Monday it has received a strategic investment of funds tied to private equity firm GTCR. Visionary plans to use the dollars to invest in the construction of new fiber networks throughout Wyoming, Colorado and Montana. They will also be utilized to satisfy match requirements for opportunities with grant programs in the near future.

PROGRAMMING

BET+ is bringing together the cast of "Martin" nearly three decades after the show's premiere. "Martin: The Reunion" will arrive on the streamer on June 16. – Docuseries "Endangered" is coming to **HBO** on June 28 at 9pm. The show, executive produced by *Ronan Farrow*, will also stream on **HBO Max**.

PEOPLE

Fox Corporation tapped *Gabrielle Brown* to serve as EVP/ Chief Investor Relations Officer. Based in New York, she'll succeed *Joe Dorrego*, who will continue to serve as Chief Operating and Chief Financial Officer at Fox News Media. Brown comes from UBS where she served as Managing Director specializing in the global internet and media industries. – *Kevin Folk* is joining Vexus Fiber to serve as Regional Vice President of the company's New Mexico operations. He joins from Shentel, where he spent 17 years and rose to the rank of VP, Wireless Network Operations. – WWE named *Catherine Newman* as EVP/Head of Marketing. In this role, she'll oversee marketing, community relations, creative services and photography. Newman was most recently CMO of Manchester United Media.