

## DATA VERIFICATION & PREDICTION ELEVATE VIDEO SERVICE MONITORING, CONTENT PROTECTION, AND FAST CHANNEL DELIVERY

Pay TV operators and content providers are increasingly using data analytics throughout the media chain to optimise video service monitoring, enrich their FAST offerings, and secure their content. There's also a growing preference for semi-supervised systems that can act autonomously. The reason is simple: with data verification and prediction solutions, operators and content providers can gain actionable insights to increase their efficiency, secure content, and improve their profitability.

### THE ROLE OF DATA IN ENHANCING VIDEO MONITORING

Data verification and prediction play a crucial role in video monitoring, providing pay TV operators with real-time insights into the health of their service and enabling them to identify trends, potential monetization opportunities, and piracy concerns. With a data-driven monitoring approach, operators can proactively address issues, optimise resources, and enhance viewer experiences, ensuring content delivery is consistent and of high quality. Ultimately, utilizing data analytics for video monitoring enables operators and service providers to quickly and preemptively pinpoint problems, ensuring premium, uninterrupted viewing experiences for viewers.

### BATTLING VIDEO PIRACY WITH DATA

When it comes to stopping video piracy, monitoring and detection are key. However, detecting video piracy is challenging. With advanced data verification and prediction, content providers can efficiently detect new forms of piracy and spot anomalies. And once data is trained, algorithms can accurately detect and stop ongoing and known piracy trajectories. However, to successfully prevent video piracy, operators must adopt a proactive approach to content protection.

Data verification and prediction can also be used to identify potential unusual behavior, such as password sharing and illegal redistribution of video content. This enables operators and content providers to act proactively, instead of reactively, which is far more effective, especially for live video assets. Through data-driven verification and prediction, operators can quickly shut down illegal streaming sessions and protect their valuable revenue streams.

Here's an example: CDN leeching is one of the newest forms of piracy plaguing the video industry. CDN leeching, also called vampire services, enables pirates to use an operator's streaming infrastructure to serve their own customers, making the



illegal offering almost indistinguishable from the authentic service. However, it is not impossible to detect CDN leeching through data verification and prediction. Leveraging AI and machine learning, content providers can correlate data between the CDN structure, the service delivery platform, and the DRM licenses. The goal is to match the number of CDN sessions with the number of legitimate subscribers that launched a session. Using analytics, content providers can easily detect unusual patterns of behavior, such as more bandwidth being used than number of licenses, and carry out further investigation as necessary.

### LEVERAGING DATA TO PERSONALISE FAST CHANNELS

In addition to anti-piracy protection, data verification and prediction are also

beneficial for monetization purposes, including the delivery of free ad-supported streaming TV (FAST) channels. With FAST channel revenue predicted to reach [\\$12 billion by 2027](#), it's impossible to ignore the popularity of this streaming model. However, the plethora of FAST channels that are now available also indicates that viewers have many different options to choose from. To successfully attract, engage, and retain viewers, content providers need to deliver a top-tier, user-centric TV experience with content recommendations that align with audience preferences.

By comprehensively examining data and better understanding patterns, content providers can personalise FAST channels. Identifying patterns offers dual benefits; pay TV operators can segment targeted advertising and suggest the best-fit FAST



viaccess-orca

channels, ensuring viewers are only shown the channels and ads that are most pertinent to them. The aim is to curate choices for viewers, making sure they don't feel overwhelmed by too many FAST channel options, which might otherwise result in decision paralysis.

Another practical application of using data verification and prediction for FAST channels is pinpointing users that are reluctant to make payments. Once those viewers have been identified, pay TV operators can subsequently direct them to a tailored FAST-based proposition, which doesn't require subscription fees.

### DATA VERIFICATION AND PREDICTION ARE ESSENTIAL FOR PAY TV OPERATORS

Data verification and prediction aren't just tools. They're essential, offering invaluable insights into user behavior. When choosing a data verification and prediction solution, operators should prioritise a comprehensive data perspective that's versatile enough for monitoring, ensuring quality of service, tailoring marketing strategies, improving targeted advertising, and thwarting content piracy. Using data analytics throughout the media chain, operators can personalise content delivery, prevent unauthorised content distribution, and ultimately ensure the sustainability and profitability of pay TV offerings. ■



by Dror Mangel

VP of Products, Viaccess-Orca



by Anne-Sophie Cornet

Product Marketing Manager, Viaccess-Orca

**VIACCESS-ORCA (VO)** is a leading provider of data-driven, end-to-end solutions that empower TV operators and service providers to deliver, secure, and monetise viewing experiences on every screen. From enabling AI-powered personalised TV and targeted advertising to offering robust security and anti-piracy services, VO is continually evolving to meet changing viewer preferences and industry needs.

