



SEGMENTATION

USE CASE

CLEAR VISION CLOUD

PFT's native media recognition AI platform CLEAR Vision Cloud helps solve real-world business problems of TV networks, studios, and Streaming platforms because of its perfect combination of technology and consulting.

CLEAR Vision Cloud is a fusion of homegrown AI engines (over 35 & counting) and best-of-breed AI models enveloped by PFT's unique Machine Wisdom layer. The Machine Wisdom makes a higher-level sense of details identified by the basic AI engines to increase accuracy and actionability. Think of it as an AI platform with a human-like brain (or close to it).

At PFT, our media services team has been leveraging AI to deliver customer projects for over two years now. This experience has helped us learn two things:

- AI delivers in unique M&E business contexts, and
- AI models can be tweaked to provide more accurate outcomes

As a result, CLEAR Vision Cloud produces accurate data and makes it actionable.

Of the many successful use cases PFT has championed in the content QC space, here is one that can add immense business value to content enterprises.

Use Case

Eliminate playout errors drastically & increase monetization by auto-generating frame-accurate segmentation metadata.

Broadcast stations require content producers to follow specific guidelines to identify and mark content segments before submitting their programs and ads for playout. These segments, including blacks, color bars, tones, slates, credits, and recaps, are technical and physical. In addition, the duration of these segments is as specified by the broadcaster. This is a time-consuming, mundane process involving error-prone manual labor.

Developing an AI-enabled segmentation tool that can expedite the process is not easy. The content segments that need to be identified and marked come with noise and variations, and their accurate detection requires deeper cognition and interpretation. Also, the tool has to develop the ability to identify custom segments of a content enterprise. While it saves the operator from having to painstakingly sift through the content and mark the segments by identifying 'time code in' and 'time code out' as they are served automatically, even if a few segments or frames are missed, it requires a QC of the whole process. Hence as crucial as speed is the accuracy of outcomes.



And we have tried to achieve just that!

When PFT first deployed the AI-led segmentation tool for Hearst Television, while automation ensured reduction in the cycle, the accuracy was far from 100%. But the good thing is, every time manual QC is performed, CLEAR Vision Cloud learns automatically, improving accuracy. So over time, Hearst could ensure 100% accuracy in detecting blacks, color bars, slates, and marking these segments in the ad spots at high speed.

With CLEAR Vision Cloud, accurate segment identification is automated guided by visual, audio, and business rules and involves limited manual QC.

- Automatically identifies content and barter segments accurately (blacks, color bar, title slate, opening, and closing montages, pre-caps, recaps, credits, disclaimers, promos and commercials, text and textless segments and custom segments as defined by YOU) in your content.
- Our Patented Machine wisdom ensures comprehensive identification based on Visual, Audio, and business rules (creative blacks/cutting out stills where audio ends/rolling credit v/s credit on content).
- It identifies markers to help build the "Skip Intro" feature in Streaming platforms.
- Sophisticated Toolkit that reduces the time to do manual QC significantly. The QC Operator can view frame adjustment in just a glance.
- Vision Cloud automatically learns each time a human does QC on the machine output, so it betters itself.

Advantages

For Hearst, the time taken by CLEAR Vision Cloud was just 0.35x – 0.45x, which was 58% lesser than the time taken earlier. PFT also helped Hearst save more than 50% cost by eliminating manual intervention.

In general, for short-form workflows, 100% accuracy, with automation in the range of 95-100% and long-form workflows, increased accuracy and automation that enables 80-90% reduction of cycle time and over 50% in costs have been achieved over a period of time. In addition, AI-led automation ensures zero errors during playout and offers broadcasters the ability to insert local ads on barter segments leading to increased monetization.

- Automatic segment identification means an operator no longer has to sift through the content and mark these segments by identifying 'time code in' and 'time code out'; they are served automatically and accurately; all it now needs is a quick QC.
- No scope for error in playout.
- Customized auto-segmentation based on your rules means making AI work for you!
- Ability to insert local ads on barter segments in long-form content. In linear playout, the blacks, slates, and color bars are usually removed just before the playout. None of the physical segments are necessary for digital distribution, and ads from internet-based ad exchanges could replace commercials.