



Compira Labs Boosts Quality of Experience for Leading US Service Provider

About the Client

A leading US service provider has a broad product offering that includes OTT streaming video on demand (VoD), live TV and live sports. The service provider has aggressive strategic plans to increase its OTT live and on-demand media streaming, and dial down its legacy TV services. It is planning to expand its subscriber base for exclusive content, live sports, and on-demand video, with a target of reaching tens of millions subscribers within a several years.

Rebuffering and Low Picture Resolution Undermine QoE for OTT Streaming Media

The OTT provider knew that quality of experience is a key factor in determining customer churn and engagement. Short, easily-cancelled contracts make it easy for existing consumers and trial users to abandon them, and there's no shortage of competition.

The provider has aggressive growth targets that it was confident it could meet, as long as it could satisfy user expectations for QoE. It was important that the provider deliver the HD content and interruption-free viewing experience that streaming media consumers demand, without rebuffering or long video start times, in order to attract new viewers, counter churn, and drive user fidelity.

Going live with Compira Labs During Lockdown

The service provider turned to Compira Labs to deploy their solution across several large and varied metropolitan areas. In each area, the Compira Labs solution was benchmarked against their current video delivery technology.

The deployment in the first area was rolled out at the peak of the 2020 COVID-19 lockdown, requiring a completely remote and low-touch installation. The roll-out worked smoothly, providing last mile media delivery to thousands of subscribers. The solution was then implemented in additional geographic regions.

The service provider's network came under a great deal of extra pressure during the COVID-19 crisis, thanks to increased usage from subscribers who were locked down or sheltering in place at home, but Compira's solution held up and QoE measurably improved even under these extreme conditions.

The client

A leading US service provider with millions of TV service subscribers

The problem

The service provider wants to improve QoE for subscribers to its OTT live and on-demand streaming media.

The benefits

Thanks to Compira Labs, the service provider saw a dramatic rise of up to 30% in subscriber sessions receiving HD (High Definition) video quality, while at the same time a reduction of 25% - 40% in the rebuffering ratio.

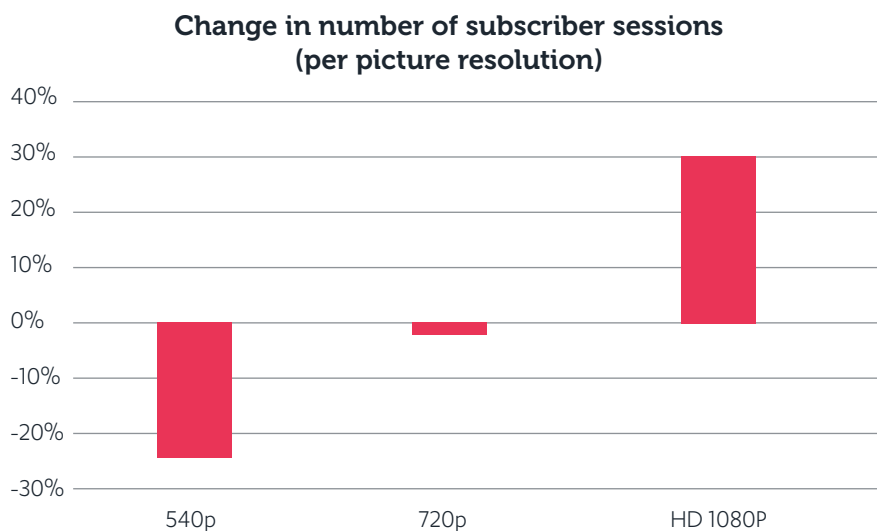
By significantly improving Quality of Experience, the service provider can move ahead with its ambitious plans to expand its OTT live and on-demand media streaming subscriber base.

HD Sessions Jump with Compira Labs Solution

The service provider measured the impact of the Compira Labs' solution by comparing the QoE metrics achieved by their current infrastructure with the QoE metrics achieved by CDN nodes running Compira Labs' software. The QoE metrics were collected using third-party tracking software installed on the viewers' video players.

The results were fantastic - the Compira Labs solution decreased the number of subscribers that received low resolution video quality by 30% and significantly increased the number of subscribers that received the highest video quality (HD).

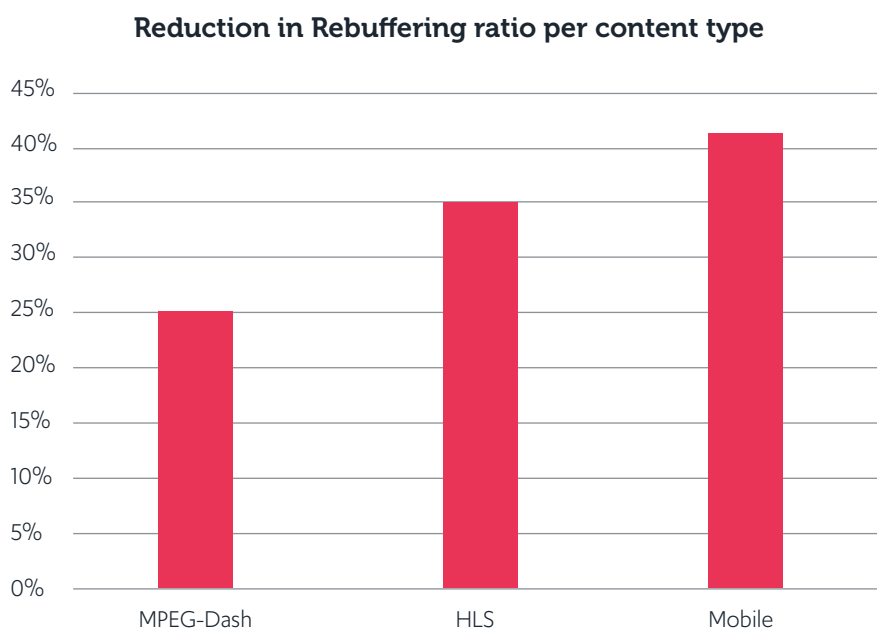
The graph below displays the change in the distribution of subscriber sessions across picture resolution (quality) levels achieved by Compira Labs in one of the metropolitan areas.



During this time period, there was a reduction in subscriber sessions receiving the lowest quality resolutions (540 pixels) of more than 25%, while at the same time there was a 30% increase in subscriber sessions at HD resolution (1080 pixels). This demonstrated that the Compira Labs' solution was able to move a significant portion of subscribers up the quality ladder, and to enable significantly more subscribers to enjoy a higher quality of experience.

Rebuffering Drops, Improving QoE

Since rebuffering is a major QoE metric and the most annoying for subscribers, it also was measured both with and without Compira Labs' solution. The results were overwhelming: Compira Labs was able to significantly reduce the number of rebuffering events per minute as well as reduce the rebuffering ratio. The following graph depicts the improvement in the rebuffering ratio achieved for live streaming in one of the regions tested.



Fixed-network subscribers consuming MPEG-Dash content experienced a 25% reduction in the rebuffering ratio, and subscribers consuming HLS content experienced a 35% percent reduction. Mobile users, on average, experienced a reduction of more than 40% (!) in the rebuffering ratio. This achievement is especially noteworthy as the improved rebuffering ratio happened simultaneously with the breakthroughs in bit-rates and video quality.

Huge Quality Leap without Investment in Network Infrastructure

As far as the subscribers were concerned, the only thing that changed was their viewing experience. They didn't have to install any new software or adjust their configurations; they simply experienced the improvement in QoE. The service provider did not need to invest in any costly new hardware infrastructure or service re-design, yet was able to achieve a significant improvement in performance.

In an explosive article a year earlier, The Wall Street Journal exposed that, in the US, even the highest bandwidth subscribers typically only receive HD video around 36% of the time, demonstrating that network bandwidth is often not utilized efficiently, and consumers may be wasting their money on large Internet packages, when their Quality of Experience is actually limited due to their last-mile network.

This service provider was confident that Compira Labs could help, and is now using Compira Labs to improve Quality of Experience in multiple major metropolitan areas, with plans to roll it out more broadly to increase their customer satisfaction levels and to differentiate their service from the competition.

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About Compira Labs

Compira Labs solves the most frustrating problem in streaming video today: quality of experience. If you've ever experienced low resolution streaming video, or had to wait while your TV episode rebuffered to show you the next scene, or heard your neighbors scream "goal!" while the game you were watching was delayed by 30-seconds, you've experienced low quality of experience. Our proprietary machine-learning powered solutions are used by CDNs and OTT video providers to ensure that end-customers will never again experience poor video quality in their homes, offices or on the go with their mobile devices..

info@compiralabs.com
www.compiralabs.com

