



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. It is planning to expand its subscriber base, with a target of tens of millions of subscribers within 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, no matter if the user was located in a large metropolitan or rural area, and regardless of if the user was using its fiber-to-the-home infrastructure (on-net), a different provider's Fiber/DSL (off-net), or streaming through mobile devices on 4G/5G networks. Short video start times with no rebuffering were needed 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 and rural 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 in which the software was easily deployed in the customers' video caches. 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 extra pressure during the COVID-19 crisis, thanks to increased usage from subscribers sheltering in place, but Compira's solution held up and QoE measurably improved even under these 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.

Benefits of Compira Labs' Solution

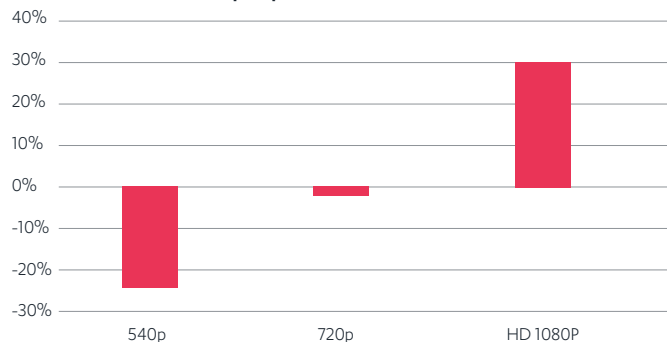
- Rise of up to 30% in subscriber sessions receiving HD
- Reduction of 25-40% in rebuffering ratio
- Resulted in expansion of OTT live and on-demand media streaming

HD Sessions Jump with Compira Labs Solution

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

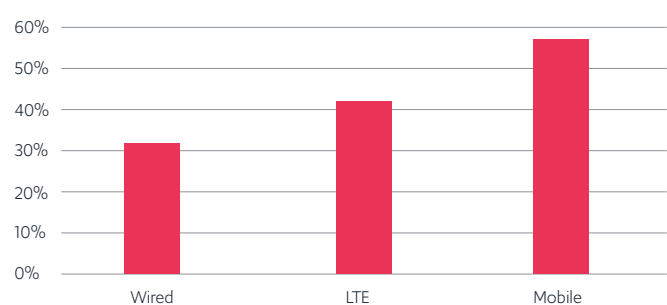
The results were fantastic. *Figure 1* displays the change in the distribution of subscriber sessions across picture resolution (quality) levels achieved by Compira Labs' solution.

Figure 1: Change in number of subscriber sessions (per picture resolution)



The result: 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 enable significantly more subscribers to enjoy a higher quality of experience.

Figure 2: Reduction in Rebuffering ratio per content type



Rebuffering Drops, Improving QoE

Since rebuffering is a major QoE metric and the most annoying for subscribers, it was measured in multiple network types. The results were overwhelming: Compira Labs significantly reduced the number of rebuffering events per minute as well as reducing the rebuffering ratio. *Figure 2* depicts the improvement in the rebuffering ratio for live streaming in one of the regions.

Fixed-network subscribers using DSL or fiber-to-the-home experienced a 31% reduction in the rebuffering ratio, with a reduction of 42% in 4G (LTE) networks and 57% in 5G networks!

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.

This service provider 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 customer satisfaction levels and 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. 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 mobile devices.

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