

CASE STUDY

Doubtnut Aces EduTech Video With Conviva



Problem

Doubtnut was created in 2016 as a solution to what the founders, through their online teaching experience, realized was a critical real-time need for students: doubt solving. Now Doubtnut has blossomed into one of the leading tutoring apps in India five years later.

Doubtnut's platform applies image recognition technology to answer math and science questions. When a student uploads an image of the question, the app extracts text from the image and matches it to a pre-recorded video solutions from Doubtnut's database. Since many of the students hail from rural areas, the learning videos are compressed to smaller sizes, optimized for less bandwidth, and only for Android applications. For example, students in North India were often unable to display content due to persistent content delivery network (CDN) issues in the area.

Doubtnut routinely suffered gaps in monitoring the performance of their education videos (e.g., Were more geometry videos not playable than algebra clips?). And the team sought more granular insights than their video analytics could tell them (e.g., How did the videos' quality of experience vary for students on 4G networks versus WiFi?)

Doubtnut teamed up with Conviva to illuminate these blind spots and safeguard students' offline video learning. Doubtnut implemented Conviva Experience Insights for real-time quality of experience (QoE) monitoring and Viewer Insights to granularly slice and dice learning assets and troubleshoot problematic clips.

“ From the lightning-fast integration to the needle-in-the-haystack video insights we can’t find anywhere else, Conviva fuels us with key strategic advantages every day as we continue to provide the best learning content possible for our students all across Asia.”

Gaurav Toshniwal
Doubtnut CTO



Solution:

Just as Doubtnut's app helps students answer any question, Conviva has solved whatever query Doubtnut has about their e-learning content performance.

- Streamline integration:** Doubtnut and Conviva immediately got to work on setting up integrations across Android devices. Many video measurement vendors had quick implementations, but no certification, inevitably leading to lower accuracy. However, Conviva certified every metric on every Doubtnut platform for every app release for every customer to provide completeness, accuracy, and consistency.
- Find needle-in-the-haystack insights:** Which teachers were the highest rated? Which courses resonated best with students? Uncovering answers like these were not possible with more rigid video measurement vendors. But with Conviva Viewer Insights, the Doubtnut team incorporated custom tags to personalize their content queries with unlimited breakdowns, so they can granularly slice and dice pivotal content questions.
- Troubleshoot content performance:** Suppose a student wanted to brush up on the Pythagorean theorem. Doubtnut loads a primary and backup URL for the module in case of performance issues. The team can gauge the respective performance of each version and promote or retire content accordingly. And, instead of hunting for the videos most impacted by rebuffering and other performance issues, Doubtnut can instantly drill into the relevant metric to surface the smoothest plays. Doubtnut can also analyze what attributes problematic videos share to fine-tune CDN selection as well as understand where to invest to minimize rebuffering and in turn, churn.

“The Conviva integration was so quick, easy, and thorough. Our data quality didn't degrade but only strengthened thanks to Conviva's obsession over accuracy.”

Gaurav Toshniwal,
Doubtnut CTO

“Only with the Conviva Streaming Insights Platform can we directly surface the world's most trusted video intelligence to drive experience improvements and increase viewer engagement from our students.”

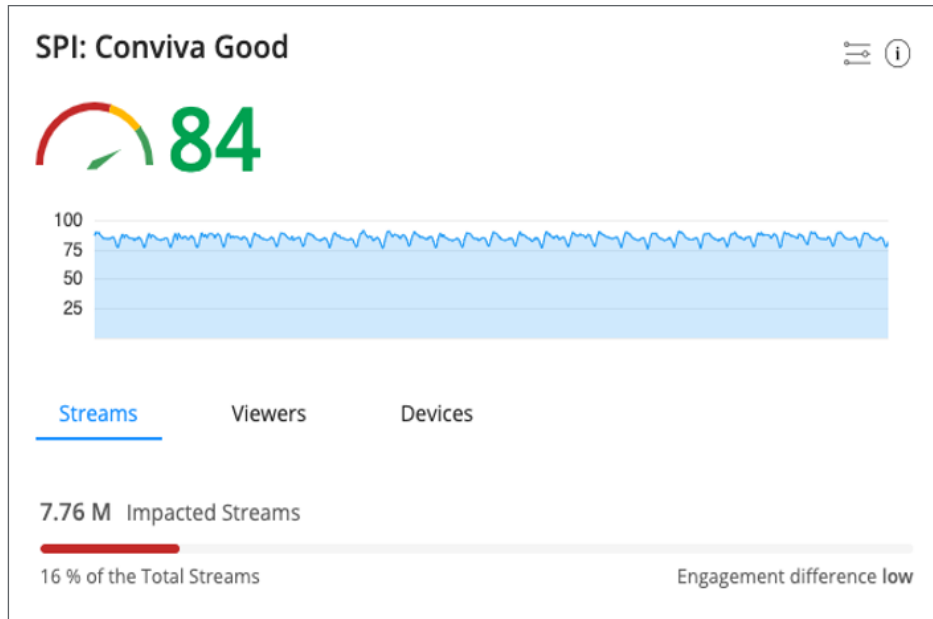
Gaurav Toshniwal,
Doubtnut CTO

Results



Data without context is meaningless. Conviva’s global footprint with 3 billion+ sensors and the world’s largest video customer base, Doubtnut could benchmark how their video performance stacked up against other EduTech businesses using Conviva’s proprietary Streaming Performance Index.

Through their partnership with Conviva, Doubtnut achieved a whopping 84 SPI, towering above the rest of the EduTech vertical. In fact, Doubtnut ranked in the top 10% of all publishers in India.



Doubtnut also recorded significantly faster start times than their peers. And thanks to these advances, Doubtnut continues to grow their audience—by 21% (Unique Device Growth, August 2020 vs July 2021).

And Doubtnut’s top-of-the-class video performance is just the start. The team will soon integrate Conviva’s APIs for granular video and app analytics to pinpoint and act upon further areas of improvement. Additionally, Doubtnut will combine robust social data, via Conviva, with their educational courses for an unprecedented view of the students’ journeys to deepen content discovery.

“ Conviva is our most trusted partner in video, and we’re just getting started. We know we can count on the breadth and depth of the Conviva Streaming Insights Platform to help safeguard and grow our video business. We’re excited about how we will continue to help students learn from the rural villages of Northern India to the towering skyscrapers of Mumbai and beyond with Conviva.”

Gaurav Toshniwal
Doubtnut CTO

Learn more about how Experience Insights can help you manage your quality and improve engagement.