

HeadSpin enables a media tech giant to improve their video & streaming quality through automated testing

THE CHALLENGE

The gaming platform company identified 4 key areas with issues that needed to be solved through testing for better gaming performance -

- Input latency - In gaming this refers to the time difference between the gamer persisting an action and the action appearing on screen
 - Velocity with scale in a continuous release model
 - Overall gamer QoE (quality of experience)
- Reproducing & triaging issues with global dev and testing teams

THE SOLUTION

Input latency - This is crucial in gaming as it affects the end user experience and might lead to loss of users due to poor experience. HeadSpin enabled them test out all gamer journeys - account creation, account management, subscription management, in addition to playing games through recorded performance sessions on real devices across the globe. They thus proactively resolved issues using these insights and recommended resolution and ensure superior gamer qoe.

Velocity with scale in a continuous release model - The hurdle here was that their testing was fragmented. They needed a unified method of testing across all the endpoints which is why they chose Appium as the endpoint for testing. HeadSpin and HeadSpin University were used as a mechanism to train their engineers on Appium. They had access to the course material and were impressed with the training. They thus started their Appium automation journey and ensured that they release at high velocity with good quality.

Overall gamer QoE (quality of experience) - This was ensured using HeadSpin's ML-based model from for game stream analysis with MOS (Mean Opinion Score). They used 2 methods for this - 1. They recorded user journeys on devices, created sessions and used the MOS generated with the context of the device and the network. 2. This was completely deviceless. A software based game stream analysis with MOS. We gave them access to our MOS models using our API. They then uploaded game streams into their API in a fully automated manner. The platform then returned the corresponding MOS to help determine game stream quality.

Reproducing & triaging issues with global dev and testing teams: The company have their dev and testing team spread across the globe working in a remote set up. The challenge here is that all developers & testers may not have the same device or same OS version and hence triaging and collaborating to solve issues was a challenge. This is where they deployed HeadSpin's CYOL (Create Your Own Lab enables companies to use individual devices to be on-boarded on the HeadSpin Platform and run automated testing. It also empowers businesses to run edge testing where the business is at a particular location and want to test their apps in that location)

ACHIEVEMENTS

The gaming platform:

- Has been able to set up test labs where they measure streaming performance through on-prem deployment
- Has been running around 1000 sessions a day.
- Has built internal dashboards leveraging the HeadSpin Business Intelligence Database. It provides custom views of data by monitoring the dashboards and mapping those trends.

About the Client

This gaming platform company enables digital transformation and empowers organizations and people by means of AI, the Cloud, and cyber security solutions. It is also a video gaming brand known for its enterprise standard and high quality devices.

About HeadSpin

HeadSpin's core product focuses on data-driven testing and iteration to perfect the end user experience combining a global device infrastructure, test automation, and ML-driven performance and quality of experience analytics.

