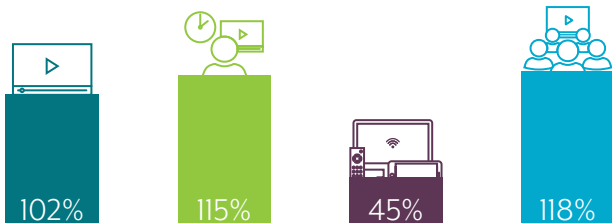


All-Screen Streaming TV Census Report

Measuring the Quantity and Quality of Streaming Video

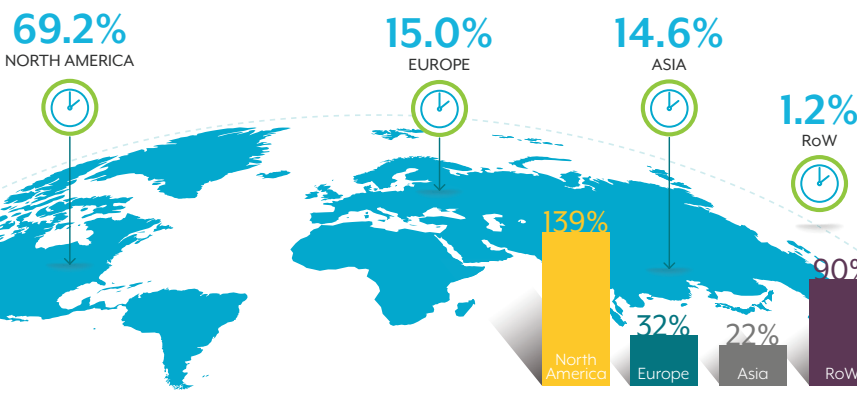
PART I: QUANTITY

GROWTH VS. Q2 2017



In Q2 2018, Conviva's global customer base initiated **17.2B** plays that drove **5.5B** viewing hours across **973M** unique apps with as many as **7.9M** concurrent streams

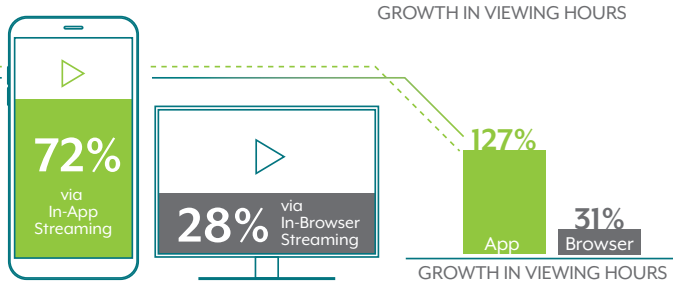
VIEWING HOURS BY REGION North America leads the pack, with Asia gaining ground on Europe for nearly even share of viewing hours.



GROWTH IN VIEWING HOURS

VIEWING HOURS IN-APP (VS.) IN-BROWSER

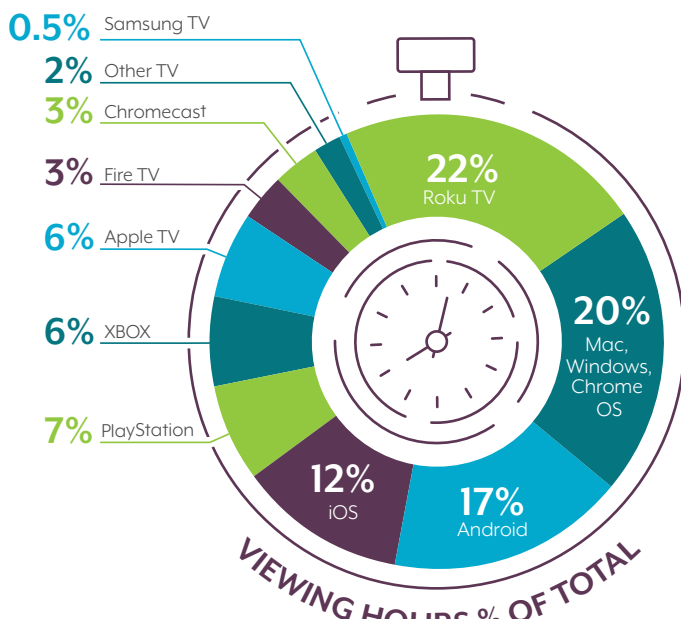
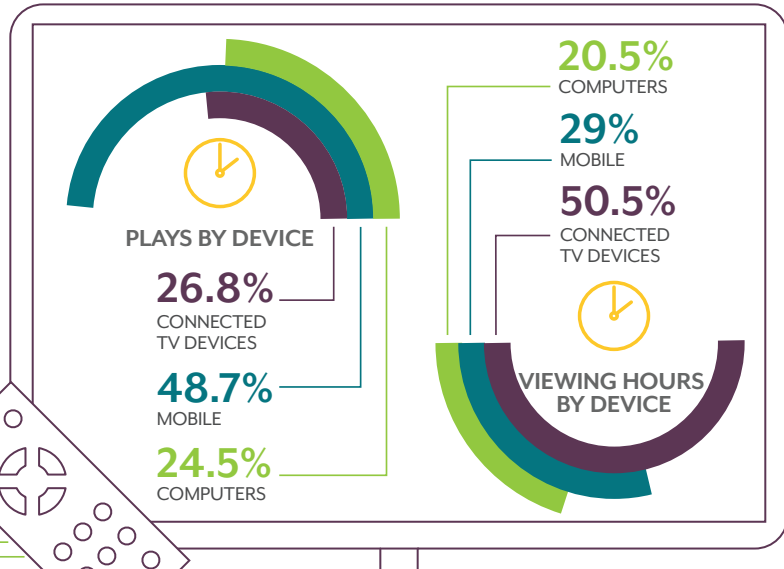
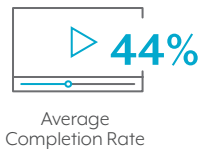
While browser-based viewing is slowly rising, app-based viewing is accelerating, and the application of TV is growing every quarter.



GROWTH IN VIEWING HOURS

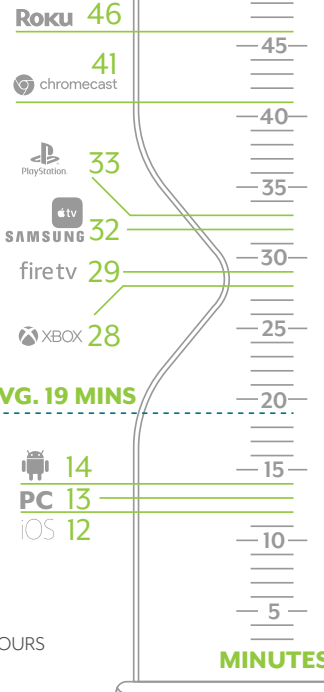
VIEWING SCREEN POPULARITY

Plays are dominated by mobile while the big screen reigns in viewing hours.

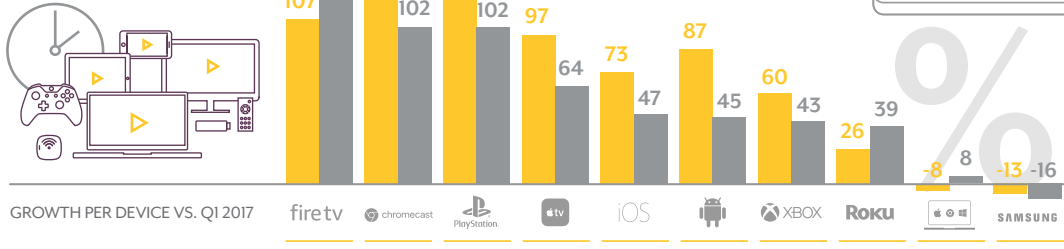


ENGAGEMENT BY PLATFORM

Viewing time by session



GROWTH IN VIEWING HOURS & PLAYS



PART II: QUALITY

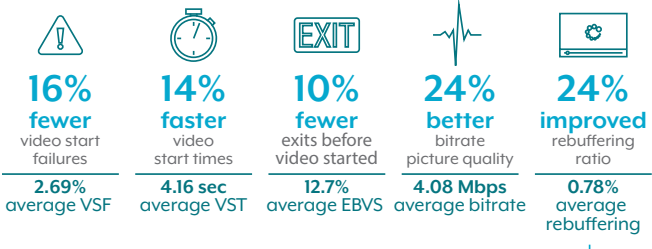
In Q2 2018, the internet lost 1 billion viewing hours

ROOM FOR IMPROVEMENT LOST PLAYS

546M video start failures + 2.6B exits before video started

3.1B Lost Plays that could have driven **1B** Viewing Hours

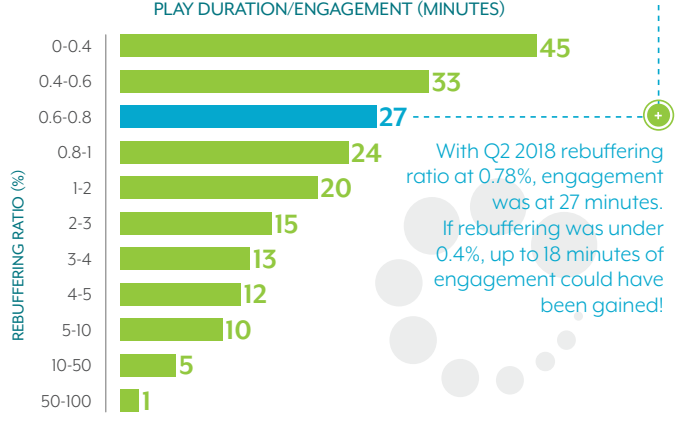
THE GOOD NEWS: IMPROVING QoE



THE IMPACT

The spinning buffering wheel impacts viewing time, viewer satisfaction, and ultimately revenue.

An astounding **5.1B** viewing hours were lost in Q2 2018 due to buffering!



Conviva is the real-time measurement and intelligence platform for many of the world's largest streaming TV publishers - in North America, Conviva measures four out of the top five MVPDs, and five out of the top 10 SVOD providers. Annually, the Conviva sensor is installed in 3 billion streaming applications and measures 50 billion streams per year for over 200 global publisher-branded applications. This represents the largest multi-publisher, independent census data collection and measurement network in the world.

The data in this report is a fully anonymized census measuring every second of every stream from Conviva's customer base between 04/01/18 to 06/30/18, compared to the data from the same time period last year, Q2 2017.