

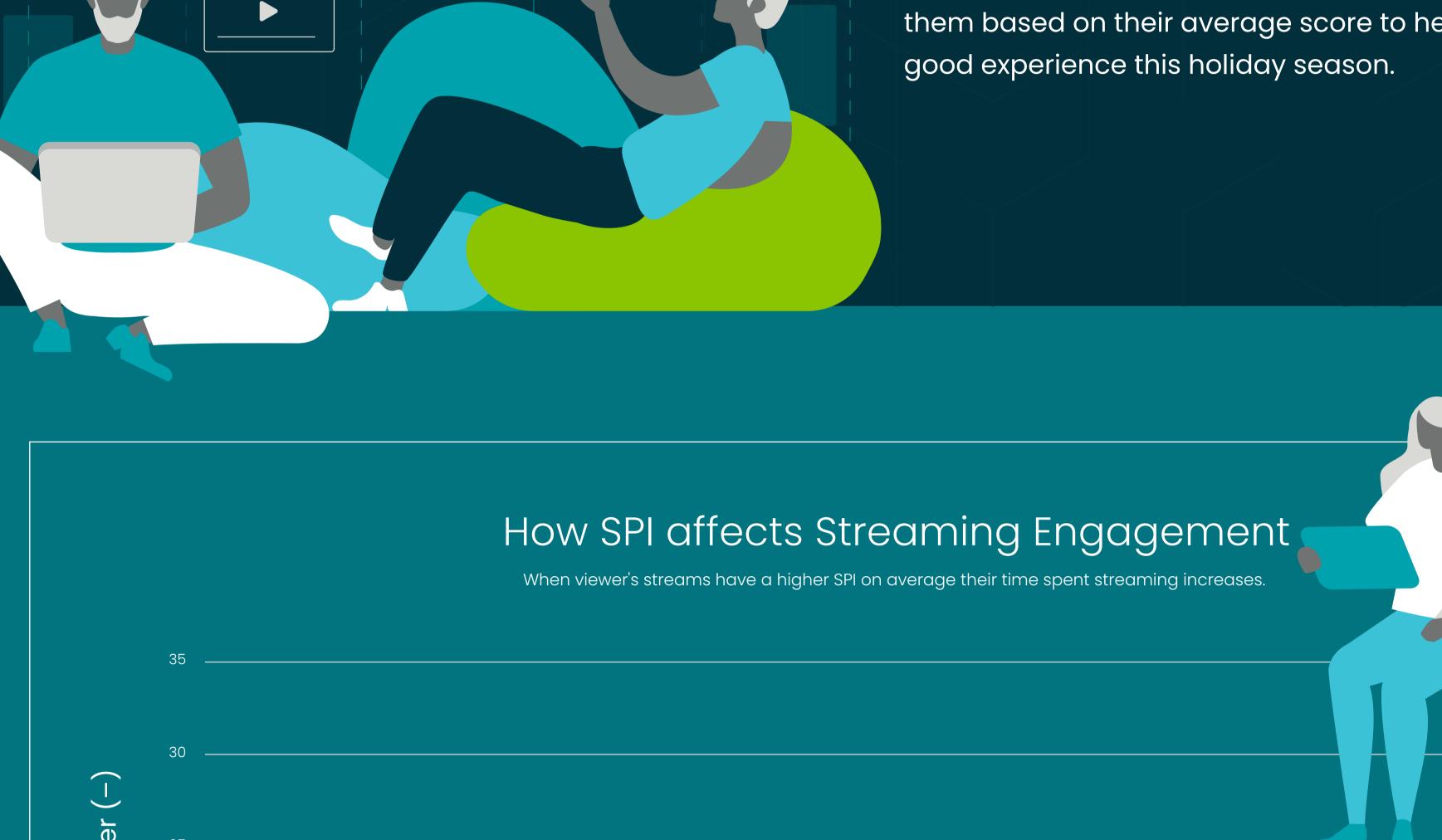
Streaming Holiday Device Guide

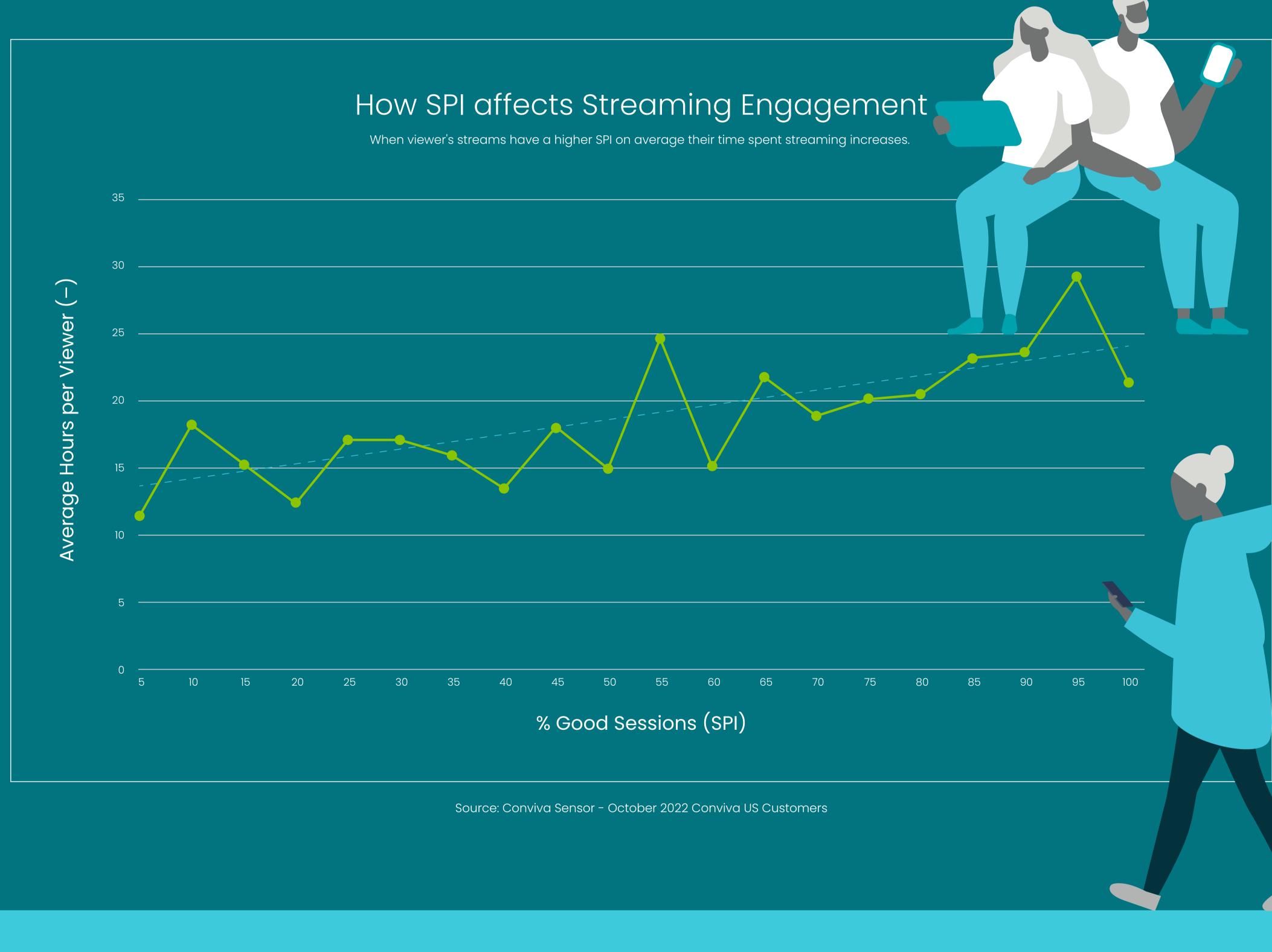
Gift someone a good experience this holiday season.

There are a lot of things that go into holiday purchasing decisions - sometimes need, often price and few would argue that what's trending or bestselling for the season can also be a motivating factor. If we're talking about price as a tried-and-true buying criteria, then we can't ignore the other top buying criteria — quality. What happened to quality? Did you know the streaming device you choose can affect your viewing experience? It's true. There are so many things that can go wrong when you hit the play button.

Conviva's proprietary Streaming Performance Index (SPI) score combines a number of key metrics into a single score that reflects the overall quality of all streams. This proprietary index is based on video start failures, exits before video start, rebuffering ratio, video playback failures, video startup time, and picture quality.

In October of this year we looked at the SPI from hundreds of devices across dozens of streaming publishers and ranked them based on their average score to help you gift someone a good experience this holiday season.





Connected TV Devices

Why it matters?

engagement and SPI. Simply put, people stream longer and more often on average when the experience is of higher quality, as reflected in the SPI score. When it comes to CTV devices it's hard to go wrong with any

recent Roku dongle. Their exceptional SPI illustrates why they

features, you'll get exceptional quality with Apple TV 4k or any

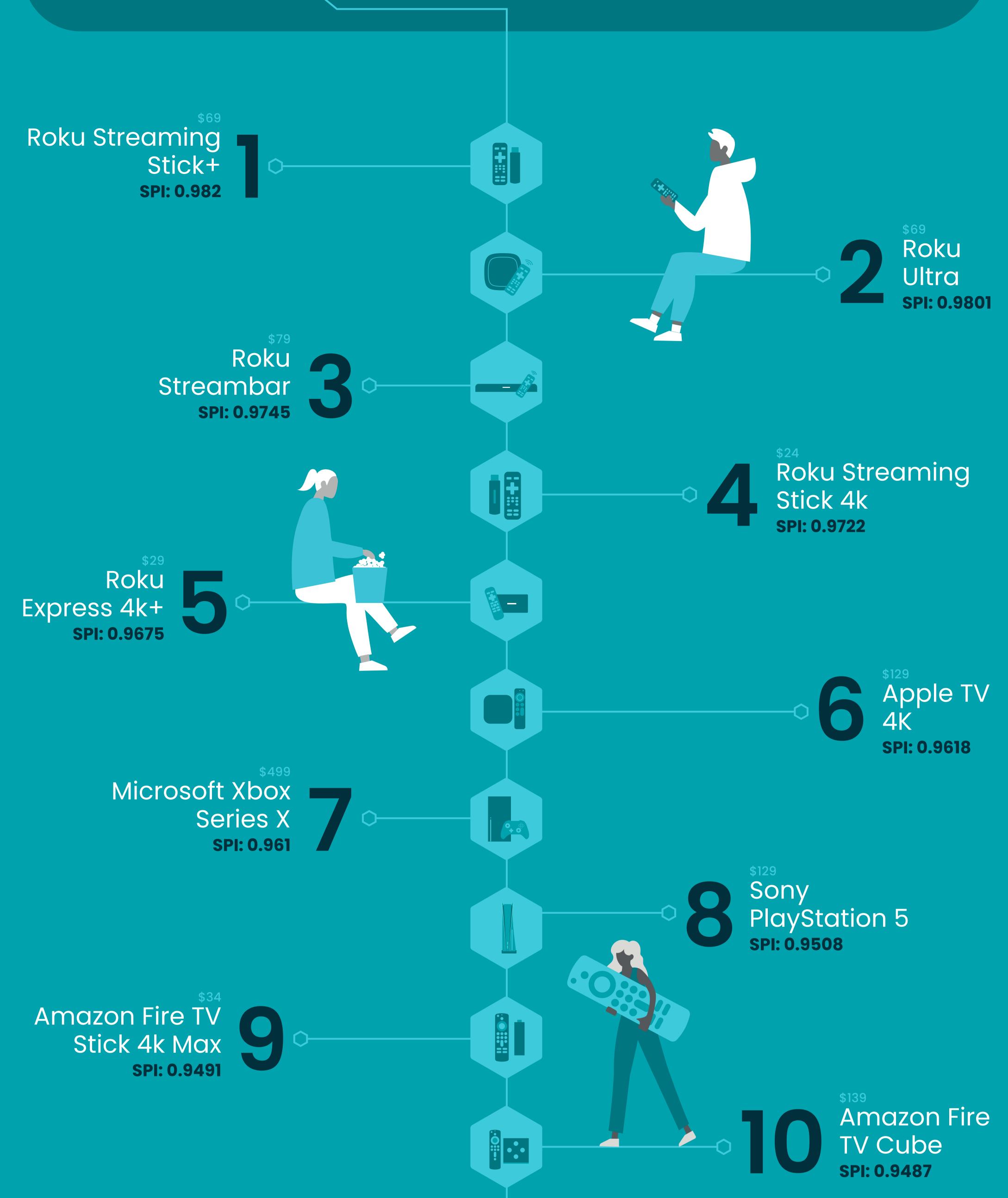
continue to be an industry leader. If you're looking for more

SPI isn't just a number, it's a measure of engagement. By

analyzing the SPI of the world's largest streaming publishers,

Conviva has proven the direct correlation between streaming

recent gaming console. Source: Conviva Sensor - October 2022 Conviva US Customers





Tablet • \$314

Mobile Devices

Mobile devices tend to have lower quality due to their mobile

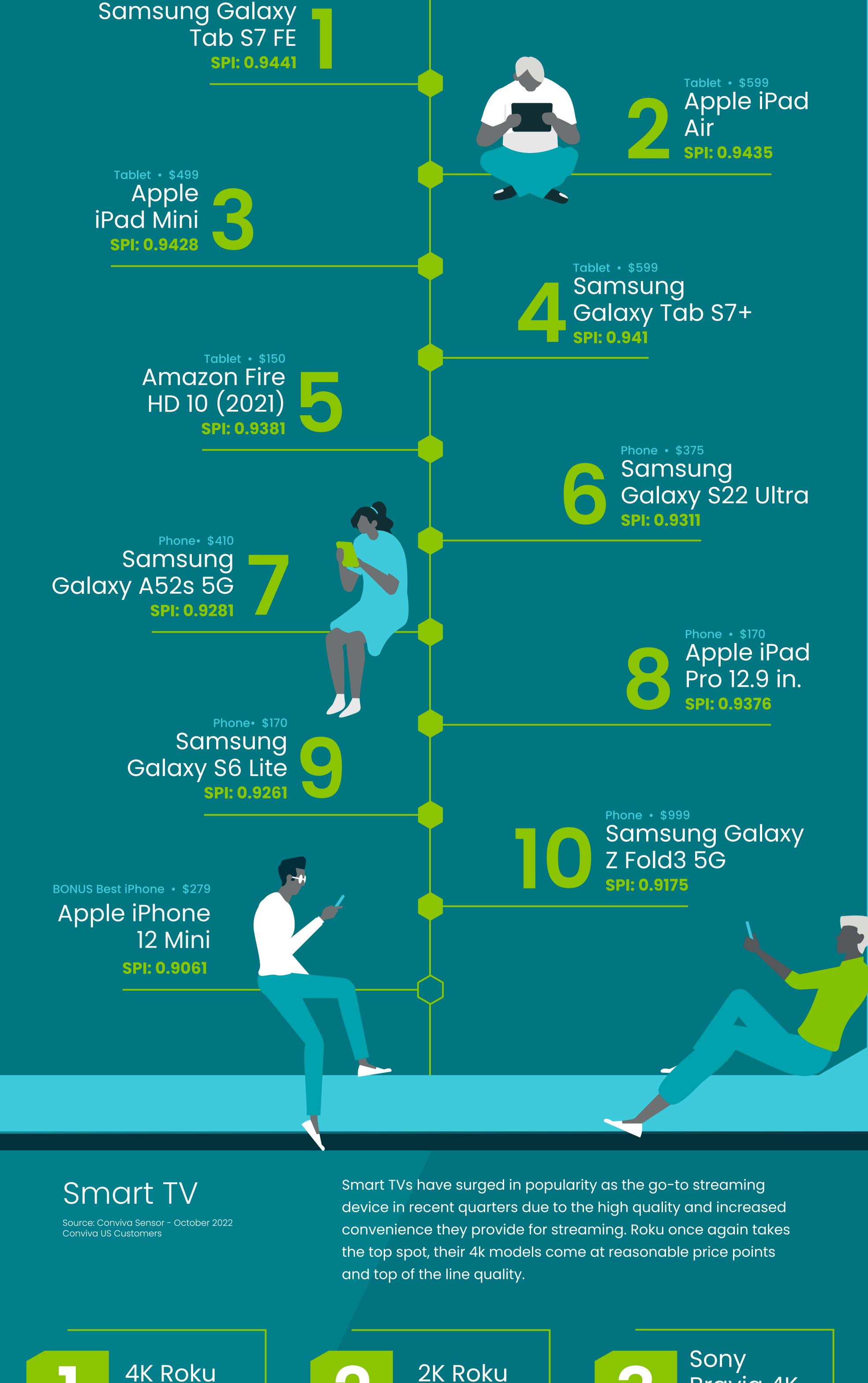
complexity with the best quality coming from tablets. However,

Samsung's Galaxy phone line provides exceptional streaming

nature as viewing outside of the home adds additional

quality in multiple models.

Source: Conviva Sensor - October 2022 Conviva US Customers



TCL Roku TV 4k UHDS

HDR

TV

Panasonic

SPI: 0.9375

Smart TV 4K

SPI: 0.9739

Philips Roku **Smart TV SPI: 0.929** TCL Android

Hisense Smart TV 4K UHD **SPI: 0.9278**

TV 4k UHD

SPI: 0.8741

TV

SPI: 0.9717

LG webOS Smart TV 4K UHD SPI: 0.9003 Vizio Smart

Bravia 4K

Google TV

SPI: 0.947

SPI: 0.8903

Price varies on model and size and ranges from \$179 -\$8,000

SPI: 0.8894

TV 4K

Methodology

SPI is the percentage of individual streams that meet the thresholds for a "good" streaming experience. Thresholds include connection induced buffering of less than 10 seconds, picture quality with bitrate over 150 kbps for mobile, 250 kbps for tablet, 800 kbps for TVs and connected devices, no playback or start failures, and less than 0.4% exiting due to long wait times. Data for this report was collected during the month of October from Conviva's proprietary sensor technology currently embedded in three billion streaming video applications, measuring in excess of 500 million unique viewers watching 150 billion streams per year with 1.5 trillion real-time transactions per day across more than 180 countries.

About Conviva

competition.

Conviva is the only global streaming analytics platform for big data that collects, standardizes and puts trillions of streaming data points in context, in real time. With Conviva, streaming businesses can understand real-world human experiences within seconds of observation and take action to grow their business ahead of the

The Conviva platform provides comprehensive, continuous, census-level measurement through real-time, server side sessionization at scale. It includes first-of-its kind-innovations like time-state analytics and AI automated data modeling. Using a single full stack sensor at the source, coupled with a single big data pipeline, Conviva's 60+ patent platform enables marketers, advertisers, tech ops, engineering and customer care teams to acquire, engage, monetize and retain their audiences. Conviva is dedicated to supporting brands like DAZN, Disney+, Hulu, Paramount+, Peacock, Sky, Sling TV and WarnerMedia as they unlock incredible