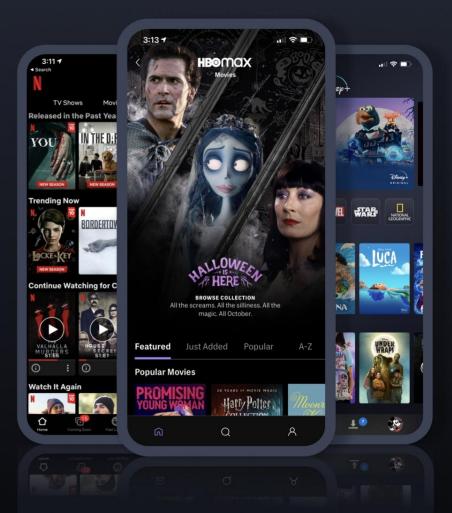


Benchmarking the Streaming Video Entertainment Landscape

With deeper performance insights for the U.S. market





1	Top Performing Streaming Apps 3
2	Subscription Apps
3	Advertising Supported Apps 20
4	Sports Apps
5	TV Network Apps
6	Live TV Apps
7	Our Data



01

Top Performing Streaming Apps YTD (Q1-Q3 2021)

All Apptopia estimates are inclusive of those from iOS and Google Play. In-app revenue estimates are what the publisher receives after fees are levied by Apple and Google.

10 Most Downloaded Streaming Video Entertainment Apps, Q1-Q3 2021

World	dwide	Unite	d States	India	a	Europ	be
#1	Netflix 130M	#1	HBO Max 38M	#1	holstar 38M	#1	Amazon Prime Video
#2	Disney+ 100M	#2	Disney+ 29M	#2	ZEE5 32M	#2	Disney+ 18M
#3	Amazon Prime Video 94M	#3	Netflix 28M	#3	JioTV 28M	#3	Netflix 17M
#4	HBO Max 57M	#4	tubi 22.7M	#4	Amazon Prime Video	#4	Pluto TV
#5	Pluto TV 41M	#5	hulu Hulu 22.6M	#5	SonyLIV 13M	#5	BBC iPlayer 3.41M
#7	Holstar 38M	#7	Peacock TV 21M	#7	Voot 10M	#7	Crunchyroll 3.38M
#8	ZEE5 33M	#8	Amazon Prime Video	#8	ALTBalaji 7.7M	#8	iTV Hub 3.37M
#9	WeTV 32M	#9	Discovery+ 15M	#9	MX Player 7.6M	#9	
#9	iQIYI 30.4M	#9	Pluto TV 12M	#9	Airtel Xstream 7M	#9	Mediaset Play 2.6M
#10	tubi 30M	#10	Paramount+ 9M	#10	Netflix 6M	#10	Joyn 2.3M

apptopia



U.S. Market Overview

Subscription Apps

Advertising Supported Apps

Sports Apps

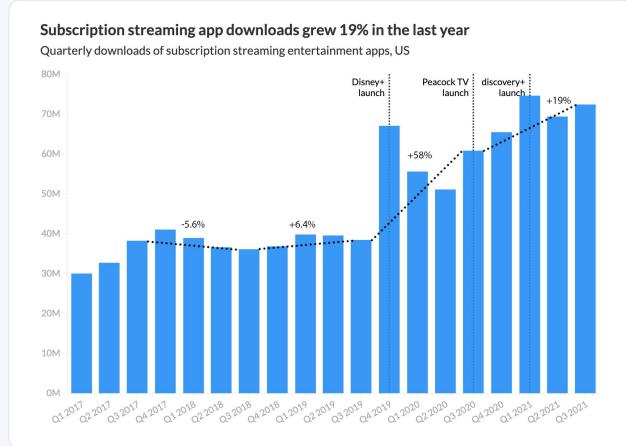
TV Network Apps

Live TV Apps

*Some apps qualify for multiple categories

All Apptopia estimates are inclusive of those from iOS and Google Play. IAP revenue estimates are what the publisher receives after fees are levied by Apple and Google.





WHAT TO KNOW

The top 25 subscription streaming apps were downloaded 72.4 million times in Q3 2021.

Year-to-date, 2021 is the strongest year for US subscription streaming app downloads with 216 million, a 29% increase year-over-year.

While both Netflix and AMC+ are subscription streaming services, customers cannot purchase a subscription via the mobile app.

10 Highest Grossing Streaming Video Entertainment Apps, Q1-Q3 2021

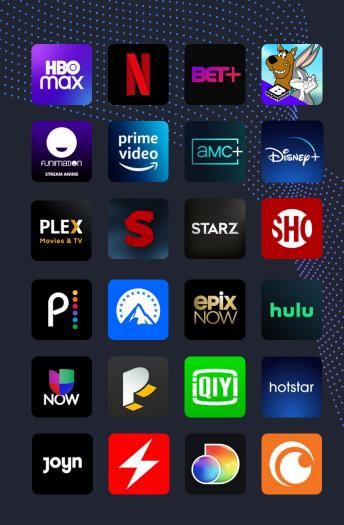
World	dwide	Unite	d States	Europ	be	
#1	Disney+ \$316M	#1	Disney+ \$159M	#1	Dis Disnept \$65	sney+ 5M
#2	Tencent Video \$240M	#2	HBO Max \$154M	#2	Ne \$18	etflix 8M
#3	iQIYI \$186M	#3	Hulu \$74M	#3	prime video \$91	nazon Prime Video M
#4	HBO Max \$156M	#4	Netflix \$38M	#4		runchyroll .4M
#5	Youku youku \$111M	#5	Crunchyroll \$37M	#5	+ my \$41	yCANAL M
#7	Netflix \$89M	#7	Paramount+ \$26M	#7		V Hub .2M
#8	hulu \$74M	#8	STARZ \$21M	#8	hay har \$1.	
#9	Crunchyroll \$58M	#9	Amazon Prime Video	#9	STARZPLAT	ARZPLAY .8M
#9	MangoTV \$57M	#9	Funimation \$19.5M	#9	Joyn Joy \$1.	yn .7M
#10	ABEMA seema \$51M	#10	Peacock TV \$18M	#10	Fu Fu Fu Fu Fu Fu \$1.	inimation .6M
Outsma	art your competition with app intelligence from apptopia.com					; apptopia

🚼 apptopia

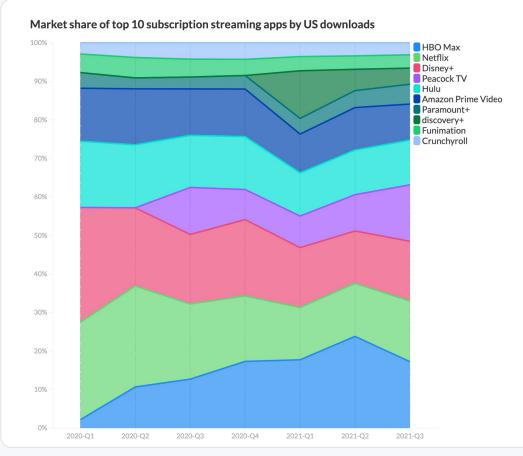
02

Subscription Streaming Apps

Apps tied to streaming entertainment options that require monthly or annual billing to access. Does not include apps used to stream live sports.







WHAT TO KNOW

There's more SVOD choices for consumers today than ever before.

HBO Max has grown dramatically, leveraging same day theatrical releases, to become the leading SVOD app by measure of net new users.

The combination of Peacock TV and HBO Max, and to a lesser extent, Discovery+, has eaten into the market share of Netflix and Disney+.



Ranked by Average Monthly Active Users, US

N	Netflix	-
HBO	HBO Max Was HBO Now until May, 2020	+3
Dferep+	Disney+	-1
hulu	Hulu	-1
prime video	Amazon Prime Video	-1
P	Peacock TV	_
	Discovery+	NEW
	Paramount+ was CBS All Access until March 2021	-
R. ANTERNA	Funimation	-2
C	Cruncyroll	-1
	Diang Inclusion Pridee O Image: Second se	Image: Big Nax HBO Max Was HBO Now until May, 2020 Image: Disney+ Image: Disney- Image: Max Disney- Image: Disney-<

WHAT TO KNOW

In May 2020, HBO NOW transitioned into HBO Max, enabling the app to climb three spots in our ranking.

Both Funimation and Crunchyroll specialize in anime. Having two anime streaming apps show up in the top 10 speaks to the demand from the US market. More on this later.

BET+, which was ranked #10 last year for this time period, is ranked #12 this year, behind SHOWTIME at #11.



Fastest growing subscription streaming apps HBO Max 📰 iQIYI 🛑 Paramount+ 🔂 EPIX NOW 🔁 Plex YoY (Q1 - Q3) percentage gain in app MAU, US 153% 128% 122% 74% PLEX 67% 0% 20% 40% 60% 80% 100% 120% 140% 160%

NEED TO KNOW

Some lesser known names are growing monthly active users faster than the incumbents.

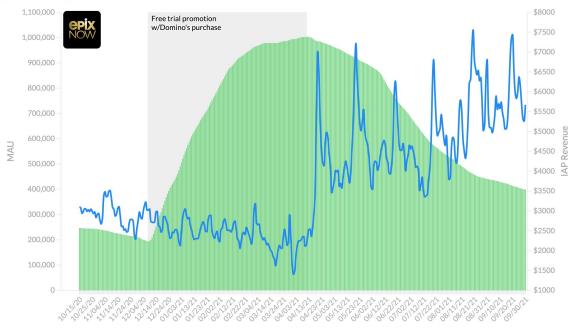
iQIYI is owned by Baidu and headquartered in China, but it has found an American audience craving popular animes such as *Attack on Titan*.

Epix, a subsidiary of MGM, is similar to HBO, Starz, and Showtime in that it's a cable and satellite television network specializing in movies and commercial free TV. Much of its growth came from a partnership deal with Domino's where users entered into a free 30 day trial after ordering a pizza online.



Free trials via a Domino's partnership grew revenue for EPIX EPIX NOW daily in-app purchase revenue and rolling MAUs, U.S.



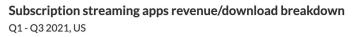


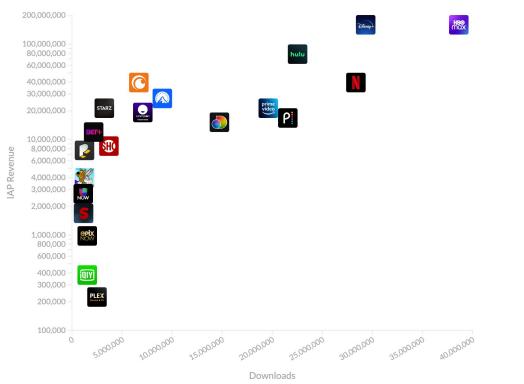
WHAT TO KNOW

Epix was able to increase its average daily revenue by 42% (comparing the 30 days after the promotion ended to the 30 days prior).

Subscriptions cost \$5.99 per month.







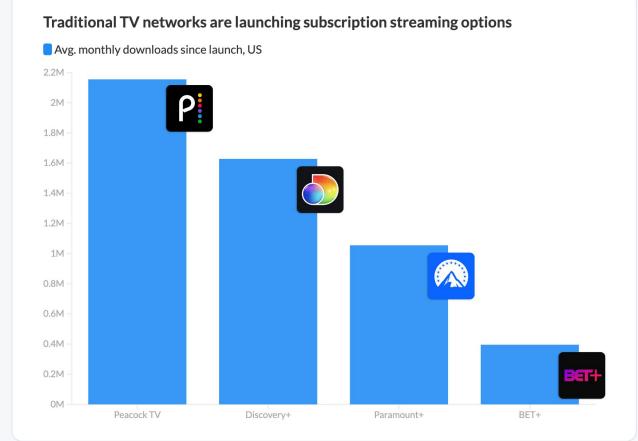
WHAT TO KNOW

Between Disney+, Hulu and ESPN+ (not charted), Walt Disney Co is the top company in US mobile app streaming video today.

Netflix has not accepted in-app purchases since December 2018. It would easily be the leader in revenue if it had continued to accept store payments.

Apps like Pantaya, Boomerang, Univision Now and Shudder are monetizing their users efficiently by catering to a niche audience.





WHAT TO KNOW

Peacock TV = NBC

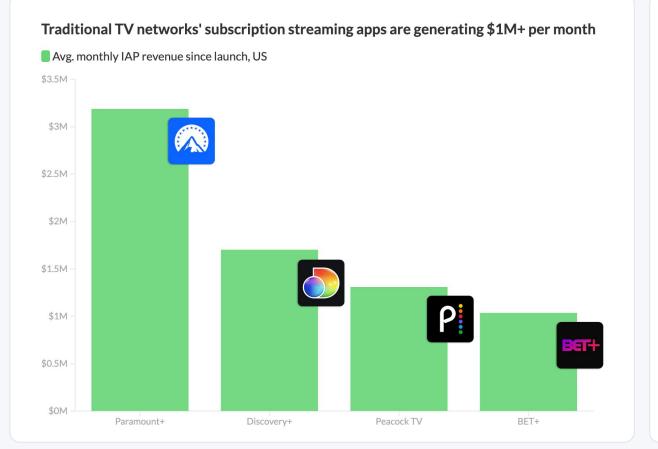
Discovery+ = HGTV, Food Network, TLC, Animal Planet, Discovery, A&E, Lifetime, History Channel and more

Paramount+ = CBS, Comedy Central, BET, Nickelodeon, MTV and more

BET+ = BET

AMC+, which launched in August 2021, has been installed just 203k times through September. A far cry from the players in the chart to the left. It does not accept payments via mobile app.





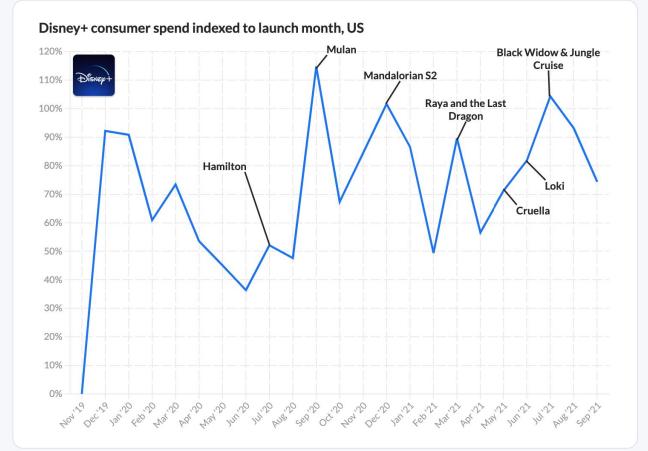
WHAT TO KNOW

CBS All Access transitioned into Paramount+ whereas the other services charted to the left launched new apps entirely.

Paramount+ was able to benefit from having its paying subscribers automatically rolling into the new app.

Outside of that, average monthly in-app purchase revenue between these services is pretty tight.





WHAT TO KNOW

User experience and features of an app play a much larger role in performance for other categories of the mobile app economy. **In streaming, content is everything**. Disney's ability to generate \$700M in US IAP revenue since launch can be tied back to major content releases.

The Marvel cinematic universe continues to be a big draw for Disney+. "Marvel" is the third most used keyword in reviews for Disney+ and 95% of keywords involving the word "marvel" resulted in a positive Impact Score. Impact Score is a weighted index Apptopia created to measure the effect a keyword has on Sentiment.

On the back of big content launches like WW84, Godzilla vs. Kong and others, HBO Max has increased IAP revenue by 328% since transitioning from HBO NOW.



tflix is living subscr	ription-free in competito	ors' heads	
Арр	Rank of "Netflix" as a keyword used in user reviews Does not include rank of respective app's name which is almost always first	Total reviews analyzed 1/1/21 - 9/30/21	
Disney+	1st	54k	
HBO Max	1st	37k	
Hulu	2nd	18k	
Amazon Prime Video	3rd	80k	

WHAT TO KNOW

The reviews mentioning "Netflix" range widely in their sentiment for the respective apps, but the point is that every streaming service is constantly being compared to Netflix by its customers.



What else can we learn from user reviews?

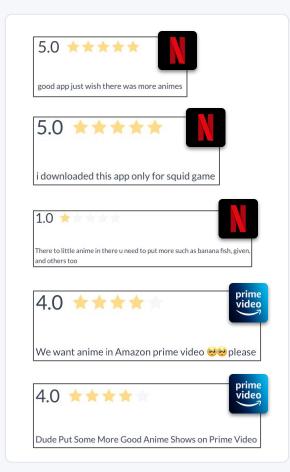
The appetite for Asian content, in the form of anime and Korean dramas, is growing in the United States.

"Kdrama" is the 4th most mentioned keyword in iQIYI, the 2nd fastest growing subscription streaming app in the US. The keyword has the highest Impact Score (7.4/10) of any other top 10 keyword for the app.

While not a top 10 keyword for Netflix, "kdrama" and similar keywords do have positive Impact Scores. *Squid Game*, a Korean drama on Netflix, generated the app's five most downloaded days this year, increasing the Netflix's paid subscriber growth for the first time in four quarters.

While Netflix and Amazon Prime Video have animes available to stream, there is a clear call for more from their customers. "Anime" is the second most used keyword in Netflix user reviews this year.

Two of the largest apps by measure of MAUs (Funimation and Crunchyroll) cater specifically to anime. HBO Max, the fastest growing app in the bunch, has a curated selection of Crunchyroll content within it.





What else can we learn from user reviews?

Outside of content, interoperability is important for streaming customers. People expect to be able to watch their shows/movies via different means, and for it all to work seamlessly.

Across the top 10 subscription streaming apps, "Chromecast" and/or "Airplay" were ranked within the top 20 keywords this year.

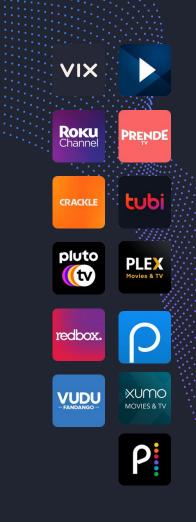
1.0	****
Wort	hless trash app
This ap	op is worthless if it doesn?t let me AirPlay to my Apple TV.
	_
1.0	****
Not a g	great app
glitchy e	hutting down and making me restart my episodes very annoying and specially with airplay and is now suggesting I shut down my device to make Hulu even work
2.0	rime ★★★★★
Chror	mecast bug
The las	necast bug t version of the app doesn?t support chromecast anymore. More have this problem, fix it!
The las	t version of the app doesn?t support chromecast anymore. More
The las people	t version of the app doesn?t support chromecast anymore. More have this problem, fix it!
The las people	t version of the app doesn?t support chromecast anymore. More



03

Advertising Supported Streaming Apps

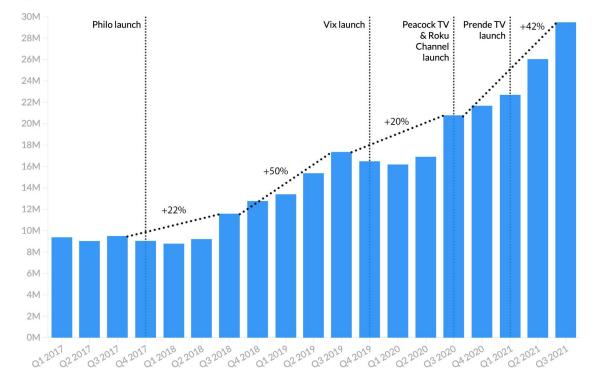
Apps with at least one revenue stream tied solely to advertising





Advertising supported streaming app downloads grew 42% in the last year

Quarterly downloads of AVOD streaming apps, US



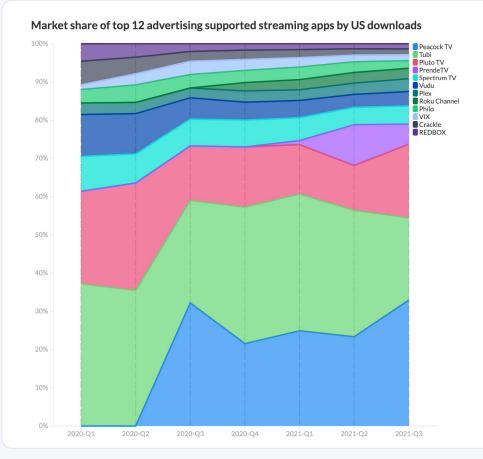
WHAT TO KNOW

The top 13 AVOD apps were downloaded 29.5 million times in Q3 2021.

Year-to-date, 2021 is the strongest year for US advertising supported streaming app downloads with 78 million, a 45% YoY increase.

Advertising supported options have seen more investment put into them over the past couple of years in order to fill a void in the market. Not everyone wants to, or can afford to pay a monthly subscription for streaming entertainment.





WHAT TO KNOW

This market is really owned by three players.

Fox, Viacom and Comcast own and operate Tubi, Pluto TV and Peacock TV, respectively. Together in Q3, by measure of downloads, these entities owned 74% of the market.

Peacock does offer two paid tiers in addition to a free tier, supported through advertisements.



Ranked by Average Monthly Active Users, US #1 Tubi _ Peacock TV #2 ρ +1 pluto (tv) Pluto TV #3 -1 Spectrum TV #4 +1 #5 Prende TV NEW VUDU #6 Vudu -2 #7 PLEX Plex +2#8 Philo _ #9 Roku Channel NEW VIX #10 VIX +1

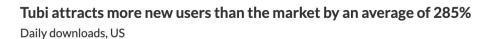
WHAT TO KNOW

Even though Tubi has lost 18% of its US monthly active users since May 2021, it still leads the group for our YTD time period.

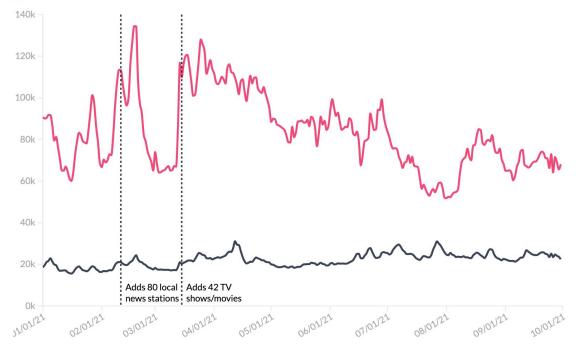
Many of these players are owned by companies also involved in subscription streaming services and/or cable networks:

- Pluto TV is owned by Viacom
- Tubi is owned by Fox
- Peacock TV and Xumo are owned by Comcast
- Prende TV is owned by Univision
- Spectrum TV is owned by Charter Communications
- Vudu is owned by Walmart







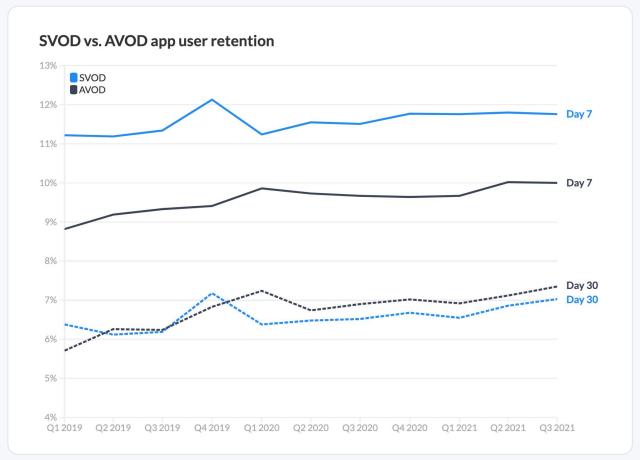


WHAT TO KNOW

Tubi's downloads have been slowing over the course of the year, but they are so far above the market average that it has had little impact on its share of the market.

The average gap in daily US downloads between Tubi and the AVOD Market Average sits at 285%.





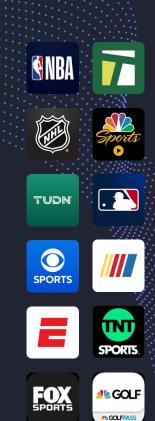
WHAT TO KNOW

Many SVOD offerings come with free trials and have premium content, resulting in a significantly higher user retention rate for the 7 day period.

As things progress, rates get closer together because free trials run out and it's very easy to continue using a free product.

Verizon partnered with Disney+ to provide the service for free for one year for qualifying customers, leading to an increase in user retention for the SVOD market in Q4 2019.





NFL.

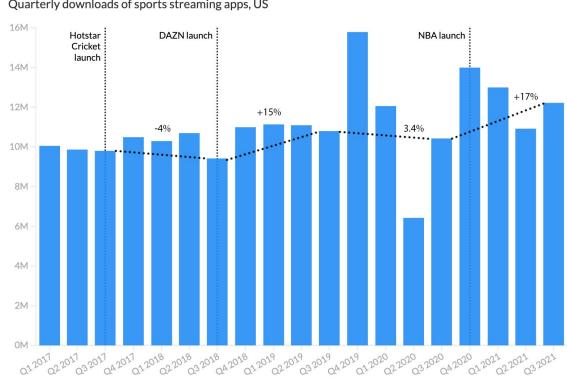
DA



Sports Streaming Apps

Apps used exclusively to stream live professional sports





Sports streaming app downloads grew 17% in the last year

Quarterly downloads of sports streaming apps, US

WHAT TO KNOW

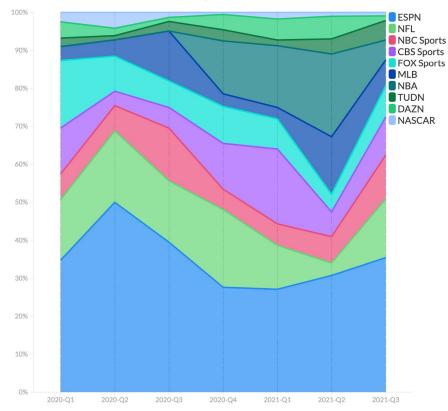
The top 15 sports streaming apps were downloaded 12.2 million times in Q3 2021.

This market's upside is somewhat capped, as many of the apps cater to one sport and consumers have the ability to add these networks to their cable package or live TV streaming package.

The very noticeable drop in performance during Q2 2020 was due to the pandemic which shut down live sports worldwide.



Market share of top 10 sports streaming apps by US downloads



WHAT TO KNOW

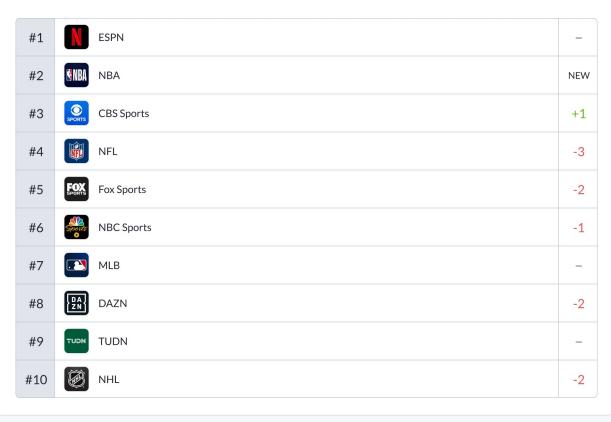
The launch of the new NBA app in the United States shrank most everyone's market share initially.

NASCAR Mobile is surprisingly last on the list here given that car racing is one of the most popular sports in the country. About 25% of the app's user reviews were left to notify the developers of performance issues and bugs.

According to Apptopia Review Intelligence, Performance & Bugs was the leading 'Intent' for users of the app to leave a review this year. Looks like the NASCAR app needs to make a pit stop to get things running smoothly.



Ranked by Average Monthly Active Users, US



WHAT TO KNOW

ESPN has an advantage over several of the apps it competes with because it covers the majority of sports, rather than say the NBA app, which will only show basketball games. Still, its name brand and marketing prowess keep it above competitors in similar positions (CBS, Fox, NBC).

The NHL recently struck new TV rights deals with ESPN and TNT, dropping NBC Sports. This could impact performance moving forward as ESPN markets the sport to a larger audience.



Fastest growing sports streaming apps TUDN 📰 Tennis Channel 🛑 DAZN 🦲 CBS SPorts 🦲 MLB YoY (Q1 - Q3) percentage gain in app MAU, US 234% TUDN 205% 2029 146% PORT 51% 0% 20% 40% 60% 80% 100% 120% 140% 160% 180% 200% 220% 240%

WHAT TO KNOW

Just like any other streaming option, sports streaming apps are largely driven by content, specifically the magnitude of interest in the live events they stream.

TUDN is owned by Univision and specializes in streaming live soccer / fútbol games. Much of the app's growth comes from its rights to stream the Concacaf Gold Cup and the CONMEBOL Copa América tournament.

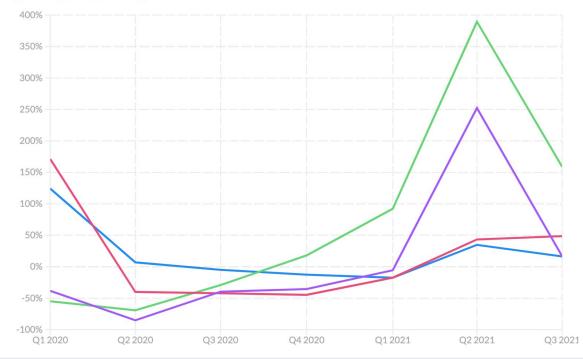
For Tennis Channel, most of its growth came from reinvigorated interest in the French Open.



IAP revenue growth rates for sports streaming apps spiked in Q2 2021

IAP revenue year-over-year growth rates, US

ESPN SNFL DAZN NLB



WHAT TO KNOW

ESPN, via ESPN+, is far and above the highest grossing streaming sports app on the market. DAZN, which ranks second, only gets 17% of its revenue from the US. Its top market is Japan (39%). The NBA was not included in the chart on the left because its current app did not launch in the United States until Q4 2020.

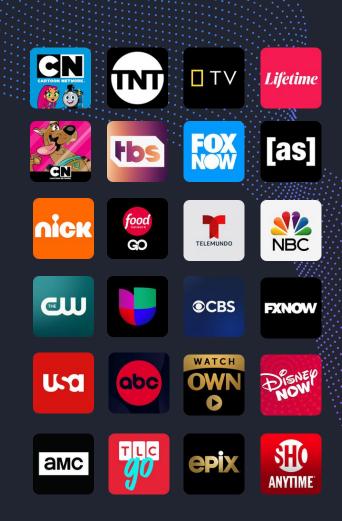
Арр	IAP Revenue YTD, US
ESPN	\$44.5M
DAZN	\$11.9M
MLB	\$10.3M
NBA	\$5.8M
NFL	\$2.8M
NHL	\$1.8M

🚼 apptopia

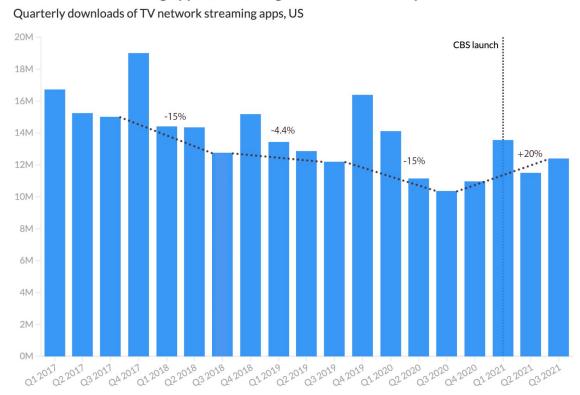
05

TV Network Streaming Apps

Apps stemming from cable TV networks, usually requiring the user to login with their cable account credentials to watch in-app







TV Network streaming app downloads grew 20% in the last year

WHAT TO KNOW

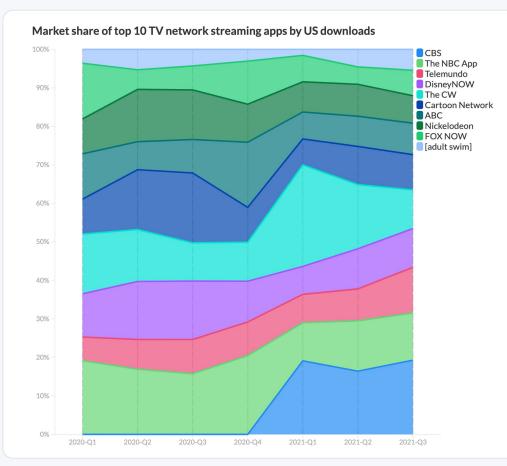
The top 25 TV network apps were downloaded 12.4 million times in Q3 2021.

This is a shrinking market as consumers look to 'cut the cord' by switching from cable to live TV streaming options such as Hulu, YouTube TV, fuboTV and more.

As traditional cable networks launch subscription streaming apps, some TV Network apps have seen their usage fall significantly as viewers are directed toward the subscription option. An example of this is Food Network GO. Viewers can now get their foodie fix in the Discovery+ app.

Q3 did see the first year-over-year growth for the quarter since 2016, thanks to new content from Adult Swim, Telemundo and DisneyNOW.





WHAT TO KNOW

Shortly after the launch of CBS, it became the leader in the clubhouse.

The new CBS app shot up to #1 Overall on the iOS App Store on March 8th, something the old CBS app and Paramount+ have never done. This may have been partially due to consumer confusion because Paramount+ launched the same day. It's possible many people downloading the CBS app thought it was Paramount+.



Ranked by Average Monthly Active Users, US

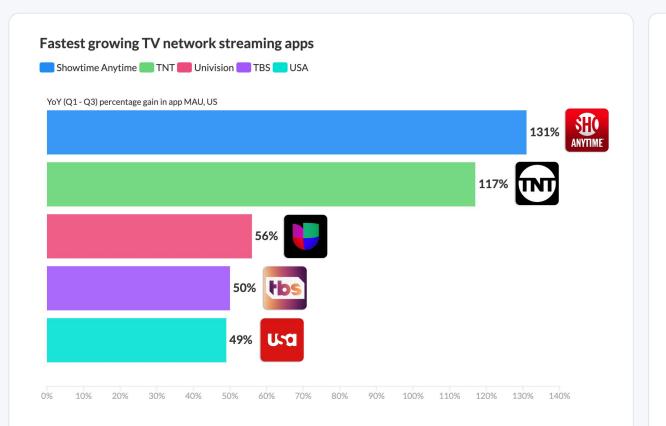
#1	The CW	+1
#2	CBS CBS	NEW
#3	NBC NBC	-2
#4	DisneyNow	-1
#5	ABC	+2
#6	Cartoon Network	-1
#7	Nickelodeon	-1
#8	Telemundo	+1
#9	FOX Now	-5
#10	TNT	+2

WHAT TO KNOW

The CW allows users to watch its top television shows for free without a cable subscription.

This gives it a major boost over competitors where a cable subscription is required. The CW app is supported by advertisements.





WHAT TO KNOW

Live sports content played a large role in the increased performance for several of these apps.

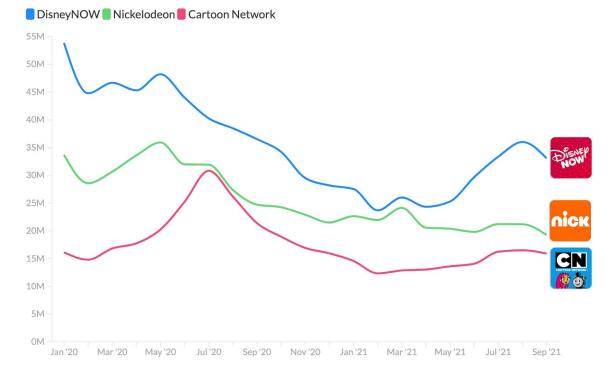
Showtime Anytime broadcast several big ticket boxing events while TNT heavily marketed the NBA Playoffs. Univision, which also owns TUDN, streamed games of the Concacaf Gold Cup to app viewers.

USA Network got a major push from its season 5 premiere of *Queen of the South.* Downloads in anticipation of the premiere increased 82% over those for the season 4 premiere.





User Sessions, US



WHAT TO KNOW

Even though this is a sinking market, DisneyNOW has been able to stay ahead of the competition because the app's goal is not just to stream episodes from the Disney Channel. It's about keeping its audience engaged with its larger content universe.

In addition to full episodes, DisneyNOW contains several podcasts and games. The recent burst in user sessions this summer was due to new episodes of the podcast, *This Duckburg Life* debuting.

Maybe Netflix took its cues from DisneyNOW when it announced its plans to provide mobile games.



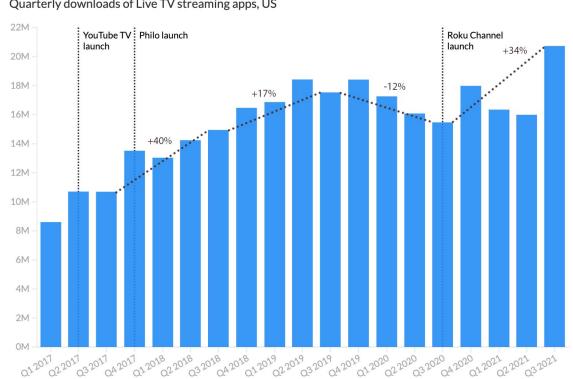
06

Live TV Streaming Apps

Apps providing access to live television, typically used to replace cable







Live TV streaming app downloads grew 34% in the last year

Quarterly downloads of Live TV streaming apps, US

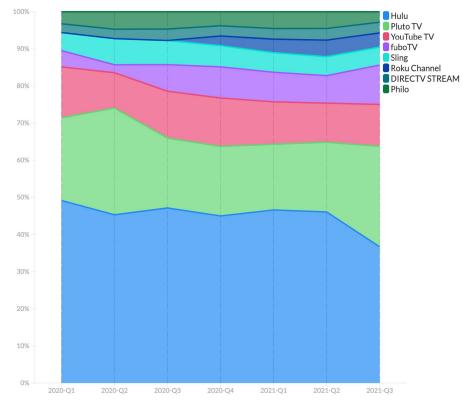
WHAT TO KNOW

The top 8 live TV apps were downloaded 21 million times in Q3 2021. This is the best quarter in the sector's brief history.

Hulu is the largest contributor to this market with a 37% share of downloads in Q3 2021. Still, many people use its services without its live television package.



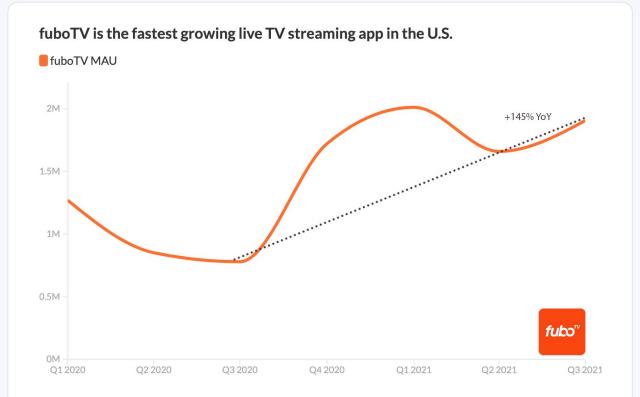
Market share of top 8 live TV streaming apps by US downloads



WHAT TO KNOW

Pluto TV and fuboTV have started to eat into Hulu's market share of new users while YouTube TV remains steady.





WHAT TO KNOW

FuboTV, is not a sports streaming app in the way NBC Sports or ESPN are. It is much more comparable to the likes of YouTube TV as it has a full slate of live television channels available. However, sports are a major reason for it being so competitive in this space.

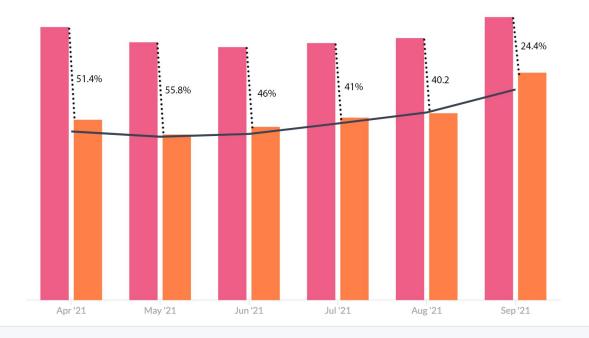
Over the past 18 months or so, YouTube and Hulu have not been able, or wanting, to strike deals with local sports networks, enabling fuboTV to fill the void for people desiring a comprehensive live TV streaming package.



FuboTV is closing the gap on YouTube TV

Monthly active users, US

Market Average (not including Hulu)
YouTube TV
fuboTV



WHAT TO KNOW

As the NFL, NBA and NHL seasons get underway, fuboTV is starting to catch up with YouTube TV as it pertains to monthly active app users.

This is the smallest gap between these two live TV apps since YouTube TV launched in July 2017. October 2021 is on pace to narrow the gap even further.

Hulu was removed from the Market Average in this chart as it has substantially more MAUs than YouTube TV and fuboTV due to it providing a substantial streaming option outside of a live television package.

Apptopia is the leader in real-time competitive intelligence



Industry Agnostic Trusted by more than 100,000 publishers worldwide

We enable brands to analyze critical competitive signals across mobile apps & connected devices.

Ś.	Google	facebook	Microsof
(oca:Cola	Adobe"	lyA	TARGET
Chartboost ⊿	verizonwireless	peacock	M
Парјоу	criteoL.	ifeed	VISA
🚭 unity	gu	Fyber	UNIVERSAL

Data on over 7M+ apps Coverage in over 60 countries

Data Points

- Downloads
- IAP Revenue
- Daily Active Users
- Monthly Active Users
- Avg. Sessions Per user
- Total # of Sessions
- Avg. Session Length
- Total Time Spent In App
- SDK installs/uninstalls
- Demographics
- Cross-app usage
- Feature tagging
- User reviews

Data Granularity

- App
- Store
- Day
- Country

Products & Solutions



Review Intelligence

Natural language processing extracts insights from over 1.5 billion user reviews

Performance intelligence on 7M+ Apps

Downloads, revenue, and usage estimates for over 7M+ apps

SDK Intelligence

SDK install/uninstall data on over 6M+ apps & over 2,900 SDKs identified

Actionable Insights

Audience Intelligence

Demographic insights on over 1.8M apps

Product Intelligence

Bone-deep product insights into every app and mobile game

Search Intelligence

ASO tools and insights to power keyword research and organic downloads

Our Data

Collect

Where does the data <u>come from</u>?

Combining the analytics dashboards for over 125K+ apps with our advanced models, we provide the most reliable estimated data for more than 7 million apps. Over the past 8 years, we have ethically sourced our data without relying on panel data, allowing us to provide the most accurate estimated mobile data without compromising our integrity.

Transform

How is that turned into <u>useful</u> data?

An app's rank is derived from the velocity of new users and existing users' usage. By reverse engineering apple and google's ranking algorithms, we are able to get download, revenue, and usage data for every app in the world.

We also use Trade Secrets to derive usage signals from the metadata of an app such as category, ratings, reviews and release notes.



You can find more information on how we collect data and create our models here: Part 1 and Part 2



Outsmart your competition

<u>Get in touch with us:</u> apptopia.com humans@apptopia.com

