

VIDEO GAME STREAMING TRENDS REPORT

2021 YEARLY REPORT



ABOUT STREAM HATCHET'S YEARLY REPORT

- Stream Hatchet's Yearly Report is a culmination of the biggest trends, stories, and insights from the live streaming and gaming industry in 2021. A quarterly report is also distributed every 90 days. Want to be among the first to hear about future reports? <u>Subscribe to our newsletter today!</u>
- Stream Hatchet works with a consortium of industry leading analysts and business leaders to understand key trends related to the impact of live streaming audiences on gaming creators, esports and the broader video games industry.

A NOTE FROM EDUARD MONTSERRAT (CEO)



"We hope you enjoy our 2021 video game streaming insights report. We have analyzed and identified key insights and trends across the video game industry, including emerging regions, challenges facing marginalized gaming communities and the growing creator economy."

EXECUTIVE SUMMARY

The growth rate achieved across the leading western streaming platforms demonstrates that esports and video game streaming are not lockdown fads. In 2021, video game streaming has become a central component in global pop culture.

- Video game streaming watch time grew 21% year over year. While not as significant as the 81% growth rate achieved in 2020, the global video game streaming audience has grown considerably.
- Video game streaming has evolved past console & PC based experiences. Major mobile games like Garena Free Fire and PUBG Mobile have helped foster massive audiences for the world's largest gaming creators and esports events.
- Gaming communities continue to struggle to build inclusive environments for women. Only 5% of this year's Top 200 streamers were female gaming creators.

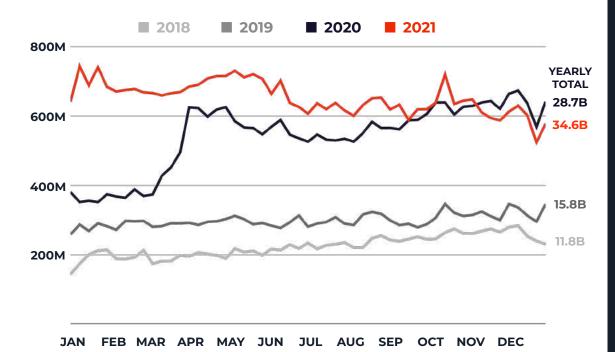


MARKET INSIGHTS

Combined and individual growth of the leading western streaming platforms

LIVE GAME STREAMING WATCH TIME INCREASES 21% YOY

Q1 2018 - Q4 2021 | ON 💯 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING



- The 21% growth rate of 2021 demonstrates that audiences grew during global lockdowns as a result of the COVID-19 pandemic, and are still strongly invested in video game streaming content.
- Content consumption habits for video game streamers are sizable. In 2021, streaming fans watched an average of 653M hours of live streams each week.
- 2021 saw consistently higher hours watched, despite a small dip of 2% in Q4'21, primarily driven by delayed game launches and major events changes driven by Covid-19 variants.

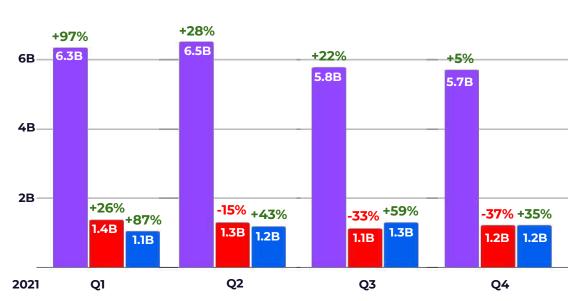


LEADING WESTERN PLATFORM WATCH TIME COMPARISON

Q1 - Q4 2021 | ON 👂 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING

HOURS WATCHED PER QUARTER & YOY % CHANGE

8B-----



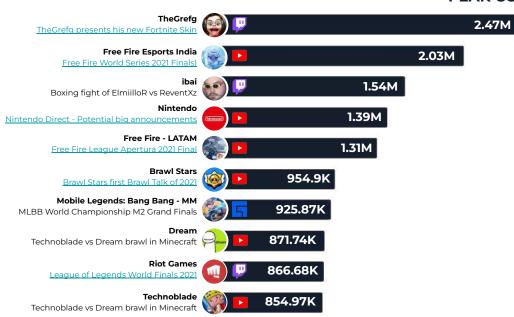
- Twitch continues to lead the market among western live video game streaming platforms, accounting for 71% of the total 2021 hours watched.
- While Twitch and Facebook have grown considerably year over year, YouTube was the only major western platform to experience a decrease in live streaming watch time (Q2 - Q4).
- YouTube and Facebook has grown even closer this year. While YouTube led Facebook in the first half of the year (2.7M vs 2.2M), Facebook's strong Q3 gains helped it pull ahead of YouTube in Q3 & Q4 (2.3M vs 2.5M).



TOP 10 PEAK MOMENTS OF 2021

Q1 - Q4 2021 | ON 📳 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING

PEAK CCV

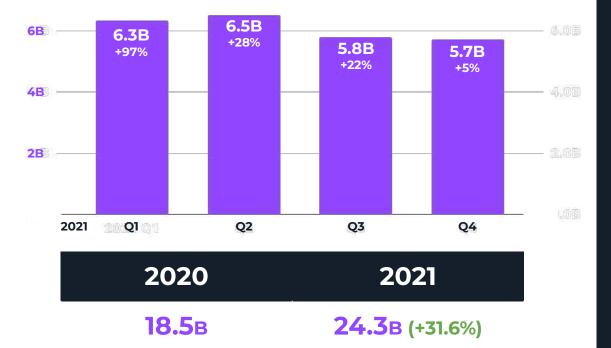


- 2021 was filled with internet-breaking moments, as many of the top streamers amassed millions of concurrent viewers.
- TheGrefg set an all-time record in video game streaming, reaching a peak of 2.47M concurrent viewers on January 11th, around the reveal of his custom Fortnite skin.
- YouTube Live Gaming has become the destination to watch hype moments. 6 of the top 10 peak moments in 2021 were generated by YouTubers.
- Esports (particularly of mobile games) accounted for 4 of the top 10 moments this year (Free Fire, Mobile Legends and League of Legends World Championships Finals).





HOURS WATCHED (YoY % GROWTH vs. 2020)

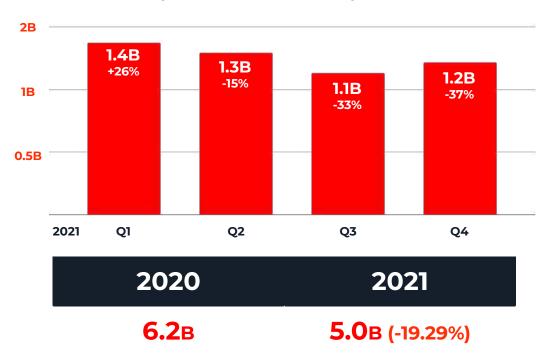


- Twitch continues to grow at impressive rates each year. The market leader in live streaming increased its total hours watched by 31.4% year over year, and added approximately 6 billion hours watched in 2021.
- While most of Twitch's growth was experienced in Q1 2021, due primarily to global lockdowns instituted by the COVID-19 pandemic, it's worth considering that its growth rate in Q2 was a significant increase relative to an already sizable Q2 2021 audience.
- The Twitch platform has continued to develop massive audiences outside of gaming; all non-gaming categories accounted for 12% of the total Twitch hours watched, and grew 64% since 2020.



YouTube

HOURS WATCHED (YoY % GROWTH vs. 2020)



- While gaming live stream hours watched decreased in 2021, YouTube has cemented itself as the go-to-platform for VOD content. YouTube self-reported 800 billion gaming-related video viewers.
- The YouTube partnerships team has been hard at work to acquire new creators in exclusive streaming deals for their platform. This year YouTube signed both DrLupo and TimTheTatMan, who generated a collective 19 million hours watched since their partnership announcement in September 2021.
- Japanese gaming creators led YouTube Live Gaming last year and generated 17% of the platforms total hours watched this year.



facebook gaming

HOURS WATCHED (YoY % GROWTH vs. 2020)

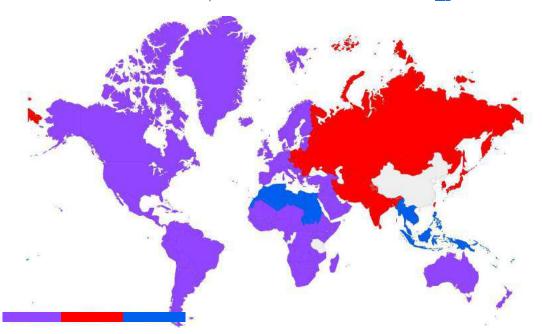


- Facebook's rebrand to Meta
 Platforms, Inc. coincides perfectly
 with the growth they have
 experienced in the video game live
 stream market.
- In Q3 2021, Facebook Gaming surpassed YouTube Live Gaming as the 2nd most watched video game live streaming platform, and tied YTG in Q4. In 2022, we will see the thinnest margins in Hours Watched between two of the world's largest video game streaming platforms.
- Facebook Gaming's growth was led by international creators streaming mobile games titles. All of the top five streamers were broadcasters outside of the United States.



MOST POPULAR PLATFORM FOR STREAMERS BY COUNTRY

Streamer by HW | Q1 - Q4 2021 | ON 🕎 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING









Stream Hatchet analyzed the top 500 streamers of each sub-region and looked at what platform had the majority to determine popularity by country. SH does not include China in this report as the majority of creators use smaller, alternative platforms.

- All three of the major streaming platforms have established massive regional followings, propelled by massive gaming creators.
- Twitch has become the preferred platform of the top gaming creators in the Americas, Western Europe, Australia, Sub-Saharan & Southern Africa.
- YouTube Gaming and Facebook Gaming have become the preferred gaming platforms for much of the Asian continent, possibly by leveraging their mobile-friendly apps in a region where the internet is primarily accessed via mobile devices.
- Facebook Gaming has been driving growth in Southeast Asia by partnering with regional publishers Tencent, Moonton, and Riot Games on tournaments and has been actively working on building community with streamers in the area.

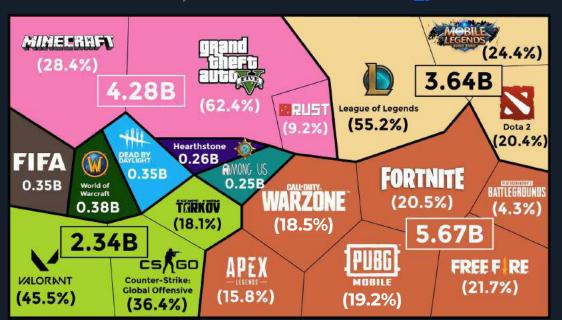


LEADERBOARDS

Top performing video games, game streamers and creator networks

TOP 20 GAMES THIS YEAR BY GENRE CLUSTER

2021 HOURS WATCHED | ON 🔑 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING



GENRES

- Battle Royale = 5.67B (32.3%)
- Open World = 4.28B (24.4%)
- \blacksquare Moba = 3.64B (20.8%)
- **■** First Person Shooter = 2.34B (13.4%)

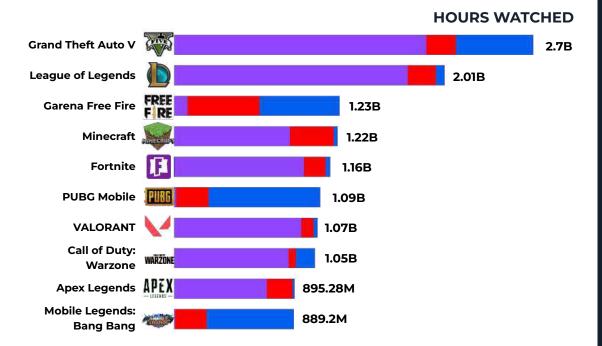
- MMORPG = 0.38B (2.1%)
- Soccer = 0.35B (2%)
- Action = 0.35B (2%)
- Card Game = 0.26B (1.5%)
- Party Game = 0.25B (1.4%)

- Shooters & Battle Royales resonated strongly with video game live streaming enthusiasts in 2021, with the likes of Fortnite, Garena Free Fire, VALORANT, PUBG Mobile and COD: Warzone all generating over 1 billion hours watched.
- The billions of hours watched generated by open world games like Minecraft, Grand Theft Auto V and Rust shows that there is strong interest in future 'metaverse' platforms.
- Riot Games has continued to dominate streaming charts with two titles, League of Legends and VALORANT, generating over 1 billion hours watched. In total that's 18% of the hours watched among the top 20 games.



TOP 10 GAMES OF THE YEAR





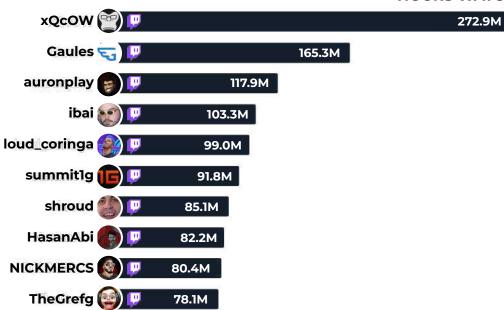
- GTA V was the definitive game to live stream in 2021, generating 2.7B hours watched, and climbing from the 5th most watched title in 2020 to number 1.
- It's tough to break into the top 10, as 9 of the top 10 games in 2020 have sustained their popularity in 2021. Apex Legends, EA's take on the BR genre, was the only new game in this year's top 10, pushing out popular tactical shooter CS:GO.
- Mobile gaming continues to rise. It should come as no surprise that 3 of the top 10 titles are mobile exclusives (Garena, PUBG Mobile and Mobile Legends).
- While Twitch certainly leads in PC / Console-based titles, Facebook and YouTube dominate the lion's share of mobile game live streaming viewership.



TOP 10 STREAMERS OF THE YEAR

Q1 2021 - Q4 2021 | ON 🕎 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING

HOURS WATCHED



- xQcOW continues to lead the pack as the most watched streamer across the leading western live streaming platforms. While 272.9M hours watched is an impressive stat on its own, it's worth noting that xQc streamed for a grand total of 3,629 hours last year, or 151 full days!
- Twitch dominates the leaderboards among the top video game streamers, with all 10 of this year's top streamers broadcasting on Twitch.
- Non-English-speaking creators continue to develop a major presence as video game streaming audiences grow globally. 3 of the top 10 streamers are Spanish-speaking and 2 of the top 10 streamers are Portuguese speakers.



TOP 10 CONTENT CREATOR NETWORKS

Q1 2021 - Q4 2021 | ON 🔑 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING

TEAM HOURS WATCHED TOP CONTENT CREATOR HOURS WATCHED



- The rise of creator networks is a key trend for brands and marketers to watch. Creator networks enable brands to activate across multiple touchpoints to hit broader groups of fans.
- Luminosity was the #1 creator network in 2021, driven by its association with xQc, who accounted for 76% of the network's total hours watched.
- In contrast, TSM has built a strong network of streamers, with its top streamer, Buddha, contributing only 18% of the organization's total hours watched.
- 100 Thieves was the only organization on this year's top creator networks to feature a female creator as its top streamer.



GAMING GENDER GAP

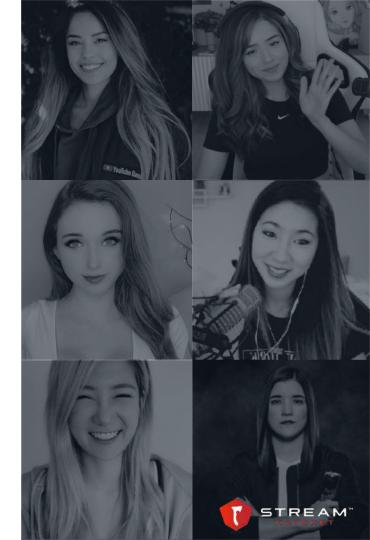
Are women fairly represented across gaming media?

ABOUT THE GAMING GENDER GAP

As video gaming increases in popularity in the cultural zeitgeist, more and more women are getting into gaming. While women represent about half of the global population, only **27%** of the top **3,000** video game streamers on Twitch, YouTube, and Facebook Gaming are female. This number has decreased slightly from **2020**, when **28%** of the top creators were female.

While these numbers have increased over the past years, female streamers are still not fully represented in the gaming community. A recent study finds that **72%** of female esports fans believe that women are not represented well in the esports space.

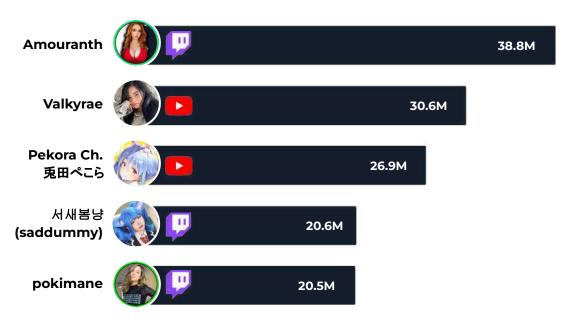
Twitch, YouTube Gaming, and Facebook Gaming are working to improve these statistics, however, more work still needs to be done to close the gender gap in gaming.



TOP 5 FEMALE STREAMERS OF THE YEAR

Q1 2021 - Q4 2021 | ON 🔑 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING

HOURS WATCHED



- The gap between top female and male streamers is continuing to close.
 Across all streamers, Valkyrae placed 63rd.
- Amouranth was the top female streamer of the year, with her "polemic" content especially in the ASMR and Pools, Hot Tubs and Beaches categories.
- Valkyrae (last year's #1) placed second with 8M fewer hours watched than Amouranth.
- Last year the top female streamer placed #63 in the overall ranking; this year Amouranth reached #46.
- Two of the top five female streamers use YouTube Gaming; the other three are on Twitch.



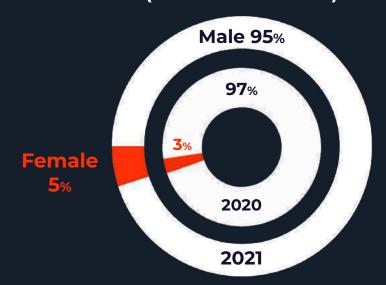
WOMEN IN GAMING

Q1 2021 - Q4 2021 | ON 🔑 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING

Are gaming audiences disproportionately skewed male?

- While gaming has been thought of as a traditionally male-dominated space, more and more women (and gender non-comforming people) are active in the space.
 - According to a YouGov poll, only 13% of women and 24% of men believe that video games do a good job of portraying women.
 - Stream Hatchet estimates that only 5% of the top 200
 Gaming Influencers are female.
- While each platform has made efforts to combat misogyny and hate speech with policy changes made throughout 2021, the distribution of female gaming creators across the top creators has only changed by 2 percentage points.

LIVE STREAMING CREATORS DEMOGRAPHICS (TOP 200 CREATORS)

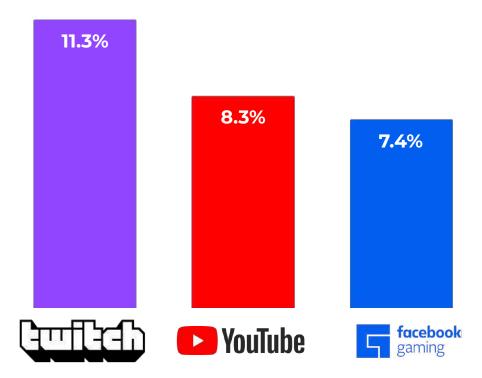


YOUGOV "Do video games do a good job portraving women and minorities?"



% OF FEMALE INFLUENCERS IN TOP 1000 CHANNELS (AVG VIEWERS) OF EACH PLATFORM

Q1 2021 - Q4 2021 | ON 🕎 TWITCH, 🔼 YOUTUBE GAMING, AND 🧲 FACEBOOK GAMING



- While the gap between top female and male streamers varies platform to platform, there is an immaterial difference between distribution of female streamers across the top western streaming platforms.
- Twitch has updated its misconduct policy several times in the past year, cracking down on harassment and hateful conduct towards women and other marginalized users.
- YouTube has promoted Valkyrae broadly across entertainment media as a role model for future female gaming creators.
- Facebook Gaming launched a series of female creator spotlights and virtual meetups to discuss issues in the industry.



HOW ARE TWITCH STREAMERS MONETIZING?

Analyzing the distribution of Twitch Subscriptions and Bits across influencer tier

GAMING CREATOR ECONOMICS

The gaming creator economy is mirroring the broader influencer marketing trend that **1%** of influencers generate a disproportionate amount of revenue.

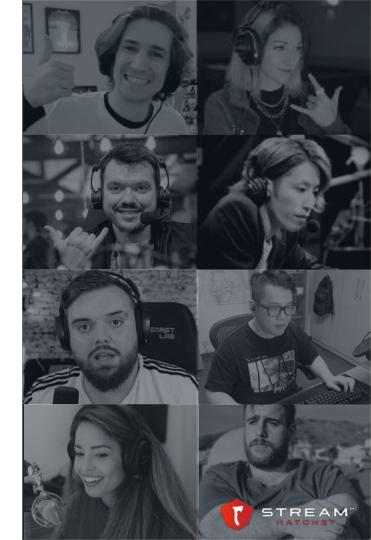
In our analysis of the total publicly-captured Twitch subscriptions & bits*, the top **1.2%** of influencers generate **15.83%** of the total estimated revenue. Meaning the average **Mega tier**** influencer generates **\$841K** per year.



DEVIN NASHCHIEF MARKETING OFFICER

NOVO

"Out of 10,000 people that click the start streaming button - only 5 of them will make minimum wage. We see 5,000 to 25,000 viewer streams generating over 70% of Twitch's revenue, but they represent less than .001% of Twitch's total streams. It's more difficult to become a broadcaster than ever before."



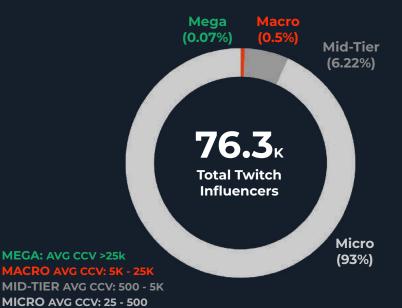
^{*}Twitch Bits are a virtual good viewers can purchase to cheer and support streamers.

^{**}Influencer tiers are described in detail on the following page.

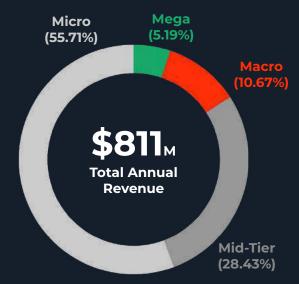
MICRO INFLUENCERS ACCOUNT FOR 93% OF TWITCH STREAMERS, YET GENERATE 56% OF TOTAL SUBSCRIPTION & BITS REVENUE

Q1 - Q4 2021 | ON 📙 TWITCH

Proportion by # of Influencer Tier



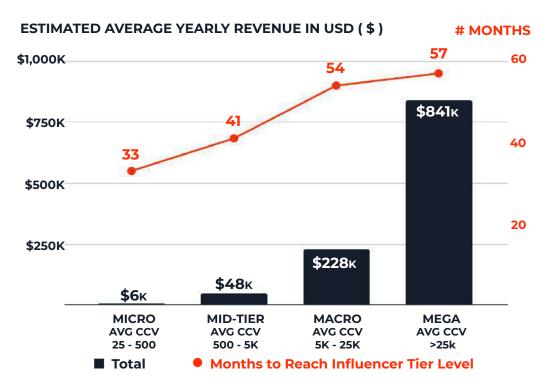
Proportion by Total Annual Estimated Revenue (\$) of Influencer Tier





AVERAGE REVENUE PER INFLUENCER TIER (SUBS & BITS)

TOTAL SUBSCRIPTIONS AND BITS REVENUE BY INFLUENCER TIER Q1 - Q4 2021 | ON 🕎 TWITCH



- On average, it takes five years for a
 Twitch streamer to reach mega tier
 influencer status, generating an
 estimated yearly revenue of \$841K.
 Currently only 50 influencers are able
 to reach this level of income.
- An overwhelming majority of the content creators on Twitch are Micro Influencers (93%), who have spent an average of 33 consecutive months streaming and have generated an annual average revenue of \$6k from subs and bits.



"Consistency over a long period of time is the battle most aspiring creators lose. If you want to make this a career, you need to think in years, not months."

STEPHEN ELLIS
FOUNDER OF PIPELINE





ABOUT THIS REPORT

DETAILED METHODOLOGY & COMPANY OVERVIEW

METRICS & CONCEPTS DEFINITIONS / APPENDIX

METRICS USED

HOURS WATCHED: Total amount of time that has been watched by ALL the viewers that have tuned in the specified channels and/or platforms during the specified timeframe.

PEAK CCV / PEAK VIEWERS: Maximum concurrent viewers tuned in the specified channels and/or platforms during the specified timeframe. This metric refers only to the number of viewers captured at the minute of maximum viewership.

OTHER CONCEPTS

PLATFORM WARS: Term that refers to Streaming Platforms offering top streaming better deals for them to migrate from their previous platform to a new one with the goal of drawing these streamers viewership.

CREATOR ECONOMY: This term refers to the economy built around content creators who utilize social media and streaming services to grow their following and monetize their content.

INFLUENCER TIERS: A custom Stream Hatchet methodology is utilized to categorize Twitch streamers into specific influencer cohorts by average concurrents. These tiers are as follows: Mega, Macro, Mid-Tier, and Micro influencers.

ABOUT STREAM HATCHET

Stream Hatchet provides data from the top video game streaming sites via a robust business intelligence platform. We power insightful, informed decisions leading to innovation and growth through the aggregation of dynamic, granular data.



SIGN UP FOR A FREE TRIAL!













ABOUT ENGINE GAMING AND MEDIA

Engine Gaming and Media, Inc. is traded publicly under the ticker symbol (NASDAQ: GAME) (TSX-V: GAME). Engine provides premium social sports and esports gaming experiences, as well as unparalleled data analytics, marketing, advertising, and intellectual property to support its owned and operated direct-to-consumer properties while also providing these services to enable its clients and partners. The company's subsidiaries include Stream Hatchet, Sidegik, Eden Games, WinView, UMG Gaming, and Frankly Media.





www.StreamHatchet.com