Inside Look At The Current Video Game Industry
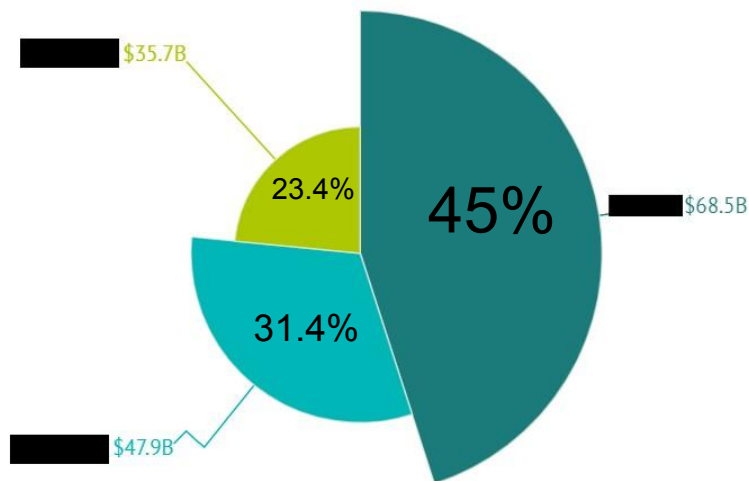
By Wiko Leonardo

Why This Data?

- Appeals to the general public.
  - A lot of people might be curious about what the market is like for entertainment in digital media, and you don't need to know a lot about the industry to be able to understand.
- Uses relatively recent data.
  - Data used is gathered from a more recent studies and findings in order to show relevant information about the industry.
- To Answer company related questions.
  - "What game to make?"
  - "Where to sell it?"
- Personal Interest.
  - Able to show information from a subject that I'm interested in, and know more about, instead of a random subject.

Defining "Video Games"

- There are many different types of video games, but it all boils down to an interactive digital entertainment. Made to be released in many different platforms like PC, Consoles, or Mobile.

- The data that I use will only be focusing about the industry sales and on the major platforms, so it will not be including free games on random sites, arcade games, and ones that can be difficult to track.

Overview

Global Games Market Value (2018)

45%

23.4%

31.4%

$35.7B

$68.5B

$47.9B

Total

$ 152.1 Bn

+9.6% YoY

$50B
$40B
$30B
$20B
$10B
0

Source: https://www.gamingscan.com/gaming-statistics/

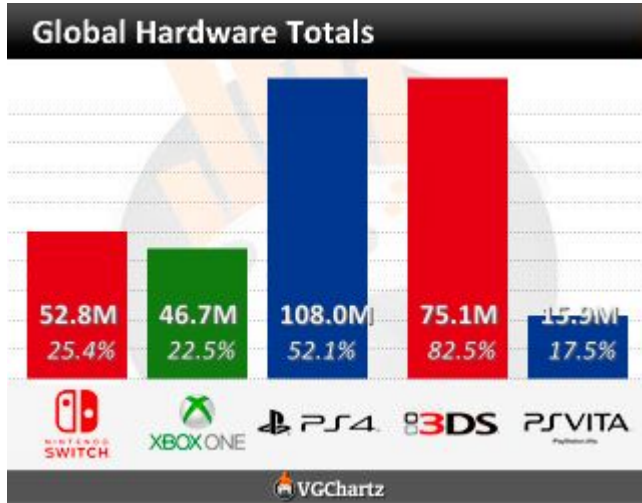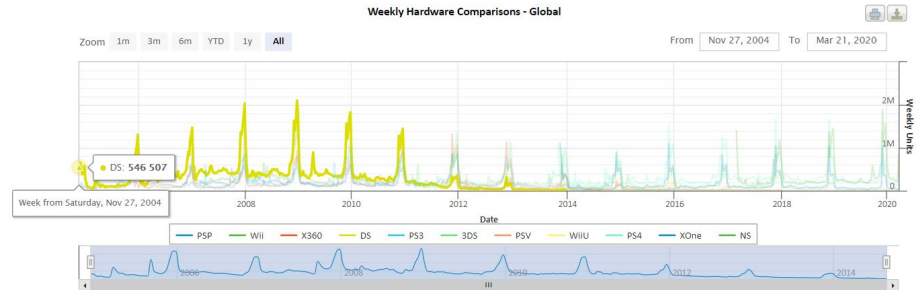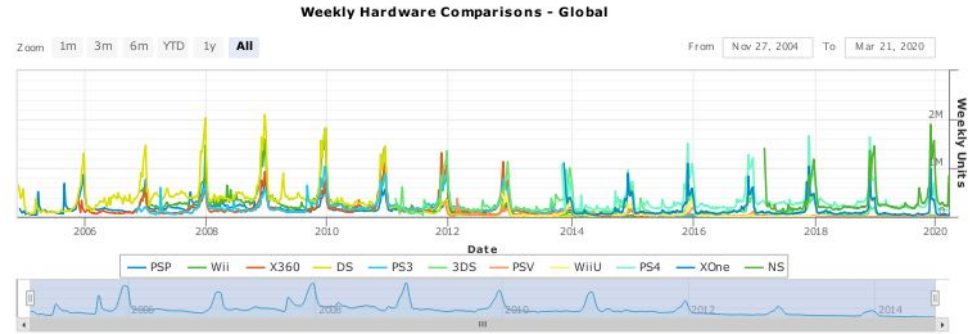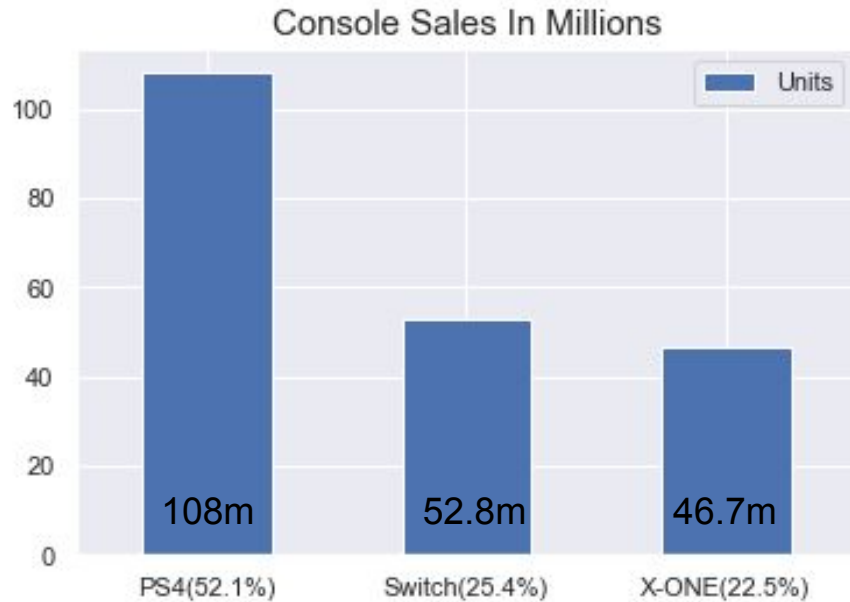# Three main focus of the data

Console

PC

Mobile

1. Starting with console

1. Gathering Data - VGChartz

The website that I will be using to track Console sales and console related VG sales will be VGChartz.com

1. Estimated Revenue

Console Sales In Millions

(PS4: 108m — PS4(52.1%), Switch: 52.8m — Switch(25.4%), X-ONE: 46.7m — X-ONE(22.5%))

Console units sold is the population size. Most triple A games are normally sold for around $50 each.

- If every PS4 owners buys the same game, a company would then earn $50 x 108m = $5400 million (or 5.4 billion dollars).
- Switch = 2.6b ($50 x 52.8m)
- XBOX ONE = 2.3b ($50 x 46.7m)

These numbers are unrealistic figures and very rough estimation only.

50 United States Dollar equals
822,650.00
Indonesian Rupiah
Apr 7, 04:23 UTC · Disclaimer

| 1 | United States Dolla ▾ |
| 16453.00 | Indonesian Rupiah ▾ |

14,272.95 Tue, 10 Mar

Data provided by Morningstar for Currency and Coinbase for Cryptocurrency

1. A more accurate example

The current top selling game on PS4 is "Grand Theft auto V"

- Grand Theft Auto V sold around 19.39m copies on PS4 alone (roughly $969.5m).
- The game actually sold on 4 different consoles, totalling roughly around 64.29m units sold worldwide. This is not even including PC sales!
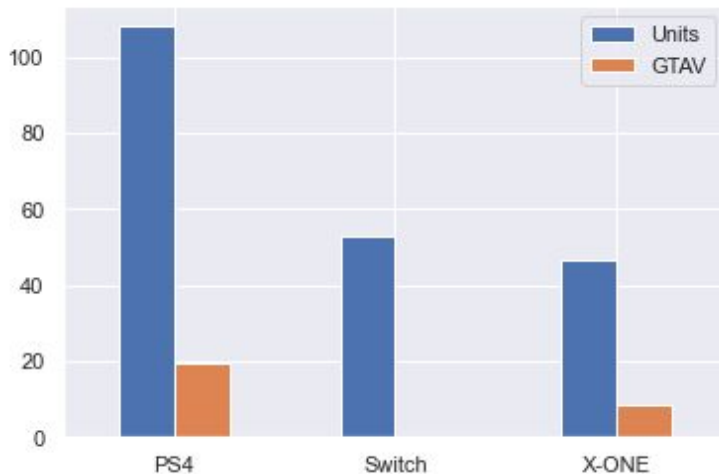
The highest selling game on PS4 is only about 17.95% (19.39/108*100) of the PS4 population, and only 18.67% (8.72/46.7*100) of the Xbox One's population.

1. Sale estimates for consoles
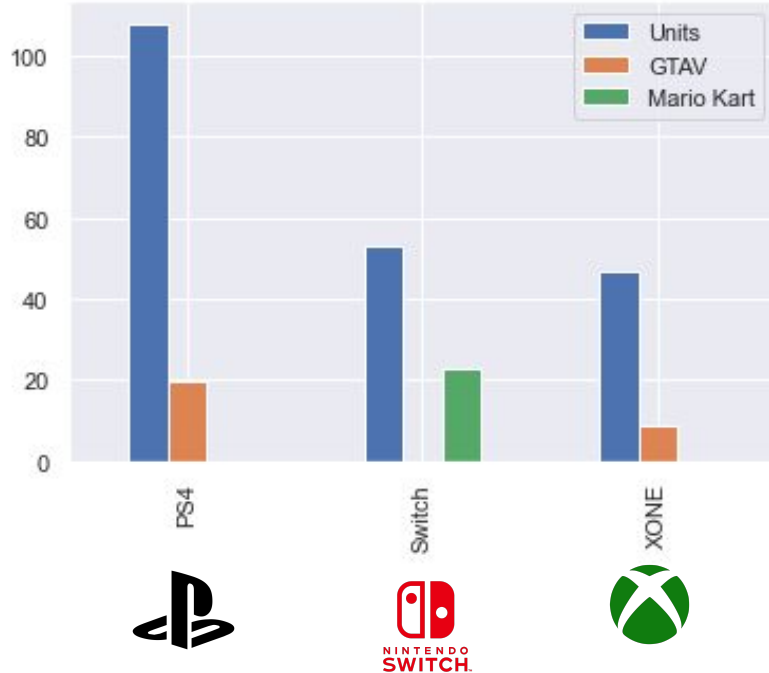
GTA V is also the highest selling game on Xbox One, at 8.72m copies sold.

While switch's highest selling game is Mario Kart, at 22.9m copies sold, making it 43.3%(22.9/52.8*100) of the total Switch population(owners).

2. PC Gaming - Platforms

2. Main focus (Steam)

Steam is often the "go-to" platform when it comes to PC gaming. It is also the one that I want to focus on, simply because their data is more accessible compared to some of the others.

2. Population Size?

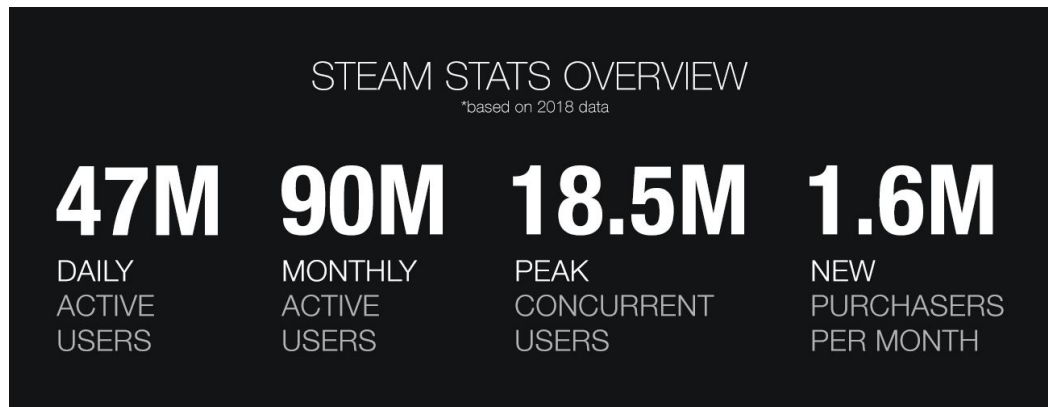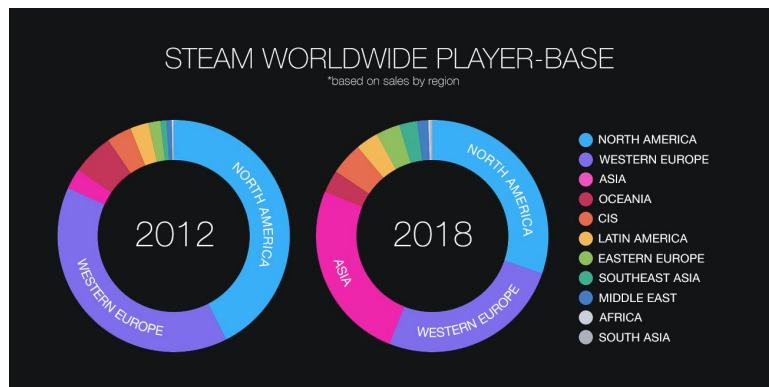how many registered accounts on steam?

2. Steam official data

STEAM STATS OVERVIEW
*based on 2018 data

47M DAILY ACTIVE USERS

90M MONTHLY ACTIVE USERS

18.5M PEAK CONCURRENT USERS

1.6M NEW PURCHASERS PER MONTH

While Steam does not release a financial report, they do have their own "Year in Review", and in 2018 Steam released some figures about their userbase.

STEAM WORLDWIDE PLAYER-BASE
*based on sales by region

2012   2018

NORTH AMERICA
WESTERN EUROPE
ASIA
OCEANIA
CIS
LATIN AMERICA
EASTERN EUROPE
SOUTHEAST ASIA
MIDDLE EAST
AFRICA
SOUTH ASIA

There are no updated figures in 2019, so 2018 is the latest official information released.

2. Concurrent players (steamdb + steamcharts)

Top games by current player count

CURRENT PLAYERS	PEAK TODAY	GAME
612,303	1,226,724	Counter-Strike: Global Offensive
384,520	709,816	Dota 2
324,088	596,513	PLAYERUNKNOWN'S BATTLEGROUNDS
137,688	228,662	Mount & Blade II: Bannerlord
113,879	188,967	Grand Theft Auto V
102,531	178,813	Tom Clancy's Rainbow Six Siege
64,280	113,459	MONSTER HUNTER: WORLD
59,164	96,358	ARK: Survival Evolved
57,651	86,698	Destiny 2
56,689	81,702	Warframe

» View all of the top 100 most-played games

Source: https://store.steampowered.com/stats/

Steam

App ID	753
App Type	Config
Name	Steam
Last Record Update	4 days ago *(29 March 2020 – 10:12:40 UTC)*
Last Change Number ⓘ	8063040

[⬇ Install] [Patchnotes] [Watch]

16,823,869
online on Steam

[Store] [Hub] [Stats]

16,823,869	**23,822,540**	**23,822,540**	**16,668**
users right now	24-hour user peak	all-time user peak	followers
		about 20 hours ago	

Source: https://steamdb.info/app/753/graphs/
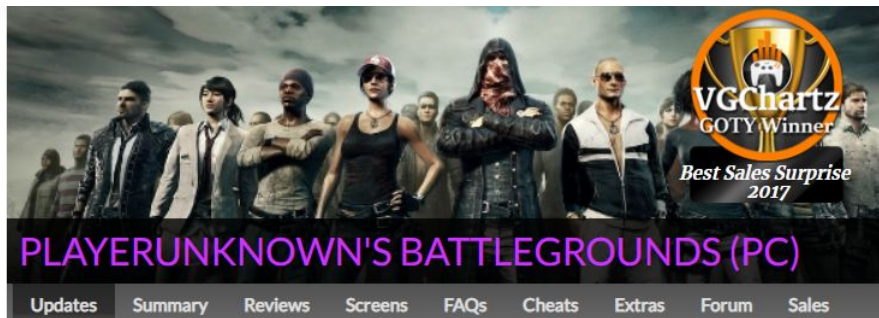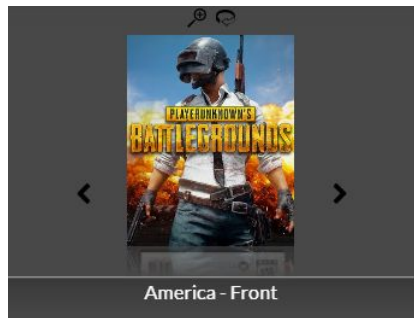
Steam's official website has a section where everyone can view the stats of certain games to see the number of concurrent players, and the day's peak, but it does not show this for all games. Other sites have to be used to gather the needed data. For this, I also use steamdb.info

2. Highest selling PC game?

PLAYERUNKNOWN'S BATTLEGROUNDS (PC)

Updates | Summary | Reviews | Screens | FAQs | Cheats | Extras | Forum | Sales

VGChartz GOTY Winner
Best Sales Surprise 2017

Shipping Total

36,604,130 Units

As of: July 1st, 2018

Related News

Valve Reveals Steam Top Sellers in 2018
PUBG Coming to PS4 on December 7
PUBG Comes to Xbox Game Pass
PUBG and PES 2019 Free to Play on Xbox One

Month	Units	Change	% Change
March 2018	2,807,003	-150,504	-5.1%
February 2018	2,957,507	-299,741	-9.2%
January 2018	3,257,248	+152,185	+4.9%
December 2017	3,105,063	+164,704	+5.6%
November 2017	2,940,359	+549,413	+23.0%
October 2017	2,390,946	+816,501	+51.9%
September 2017	1,574,445	+687,057	+77.4%
August 2017	887,388	+406,084	+84.4%
July 2017	481,304	+211,921	+78.7%
June 2017	269,383	+77,810	+40.6%
May 2017	191,573	+53,095	+38.3%
April 2017	138,478	+72,740	+110.7%
March 2017	65,738	+65,737	∞
February 2017	1	-	-
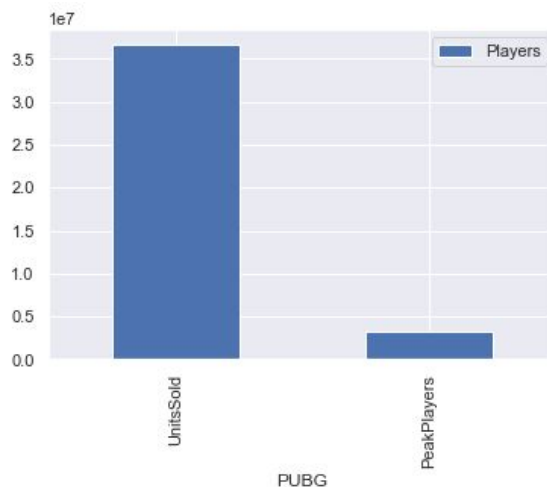
According to VGChartz, the highest selling PC game is PUBG, and it has sold over 36.6m units. However, the peak concurrent players is only at 3.2m, almost 1 year away from the game's release. The highest concurrent only reached about 8.8% of the total buyers.

2. Numbers of players for all categories

Steam has over 413 different "tags" for their games. Since not all of them are necessary, I will be narrowing it down to just the top 10 most popular ones, which is also selected by steam, backed by external research.

Browse by genre:

Action

Adventure

Casual

Indie

Massively Multiplayer

Racing

RPG

Simulation

Sports

Strategy

See popular tags

Indie	42536 products	Action	28890 products	Adventure	23727 products
Low Confidence Metric	23489 products	Casual	23272 products	Simulation	16694 products
Strategy	15184 products	RPG	13704 products	Singleplayer	12059 products
Free to Play	6067 products	Early Access	6020 products	2D	5540 products
Atmospheric	5429 products	Great Soundtrack	5396 products	Puzzle	5372 products
Violent	5058 products	Multiplayer	4684 products	VR	4216 products
Story Rich	4205 products	Nudity	4183 products	Gore	4003 products
Anime	3870 products	Sexual Content	3859 products	Difficult	3758 products
Fantasy	3748 products	Sports	3551 products	Horror	3249 products
Pixel Graphics	3243 products	Funny	3078 products	Sci-fi	3033 products
Platformer	2888 products	First-Person	2869 products	Female Protagonist	2833 products
Shooter	2802 products	Massively Multiplayer	2778 products	Racing	2777 products
Retro	2745 products	Open World	2580 products	Turn-Based	2554 products
Arcade	2474 products	Co-op	2398 products	Family Friendly	2347 products
Visual Novel	2295 products	FPS	2178 products	Cute	2178 products
Survival	2139 products	Comedy	2052 products	Exploration	2016 products

2. Visual
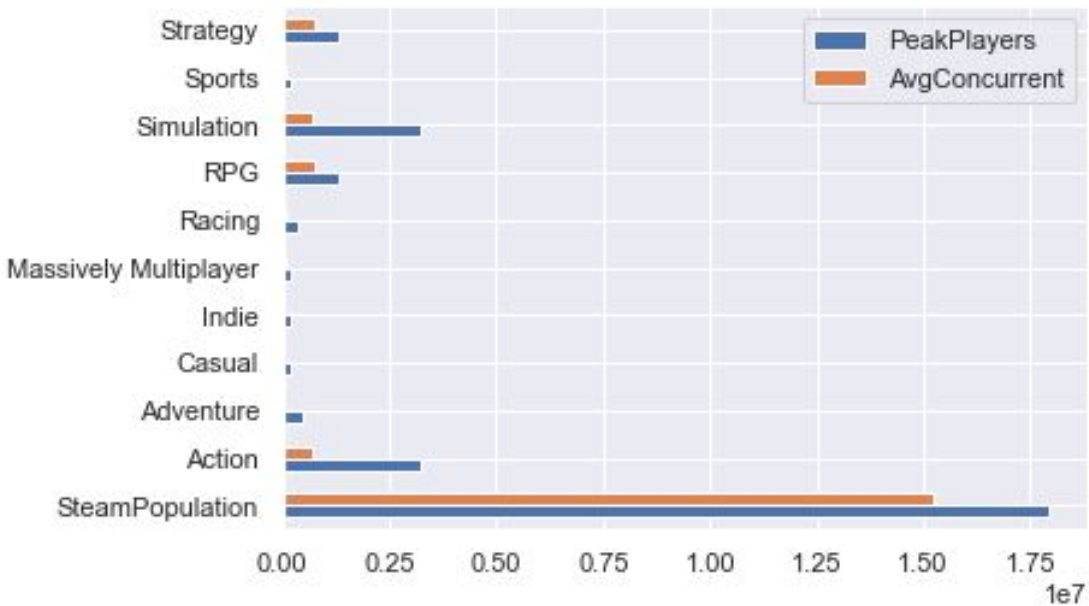
index		PeakPlayers	AvgConcurrent	Avg%
0	SteamPopulation	17955645	15228924	100.000000
1	Action	3257248	724207	4.755471
2	Adventure	472962	16441	0.107959
3	Casual	202334	25038	0.164411
4	Indie	212613	6617	0.043450
5	Massively Multiplayer	199307	106360	0.698408
6	Racing	364548	103317	0.678426
7	RPG	1295114	746724	4.903327
8	Simulation	3257248	724207	4.755471
9	Sports	189464	72078	0.473297
10	Strategy	1295114	746724	4.903327

2. Estimated revenues

index		PeakPlayers	AvgConcurrent	$50	$50 SteamCut	$25	$25 SteamCut	$10	$10 SteamCut
0	SteamPopulation	17955645	15228924	897782250	705225800.0	448891125	346112900.0	179556450	130645160.0
1	Action	3257248	724207	162862400	117289920.0	81431200	52144960.0	32572480	21429360.0
2	Adventure	472962	16441	23648100	14736075.0	11824050	5868037.5	4729620	3310734.0
3	Casual	202334	25038	10116700	4587525.0	5058350	3540845.0	2023340	1416338.0
4	Indie	212613	6617	10630650	4972987.5	5315325	3720727.5	2126130	1488291.0
5	Massively Multiplayer	199307	106360	9965350	6975745.0	4982675	3487872.5	1993070	1395149.0
6	Racing	364548	103317	18227400	10670550.0	9113700	6379590.0	3645480	2551836.0
7	RPG	1295114	746724	64755700	38804560.0	32377850	21283387.5	12951140	6713355.0
8	Simulation	3257248	724207	162862400	117289920.0	81431200	52144960.0	32572480	21429360.0
9	Sports	189464	72078	9473200	6631240.0	4736600	3315620.0	1894640	1326248.0
10	Strategy	1295114	746724	64755700	38804560.0	32377850	21283387.5	12951140	6713355.0

Steam Cut = 30% if < 10m, 25% if >10m ~ <50m, 20% if > 50m

2. Population of other PC platforms

Top 3 PC games `PC`
March '20

1. **League of Legends**
   43.1% of player share

2. **Tom Clancy's Rainbow Six: Siege**
   19.5% of player share

3. **Counter-Strike: Global Offensive**
   15.8% of player share

View all PC games →

Top 3 watched games ▶
March '20

1. **League of Legends**
   123M hours watched

2. **Call of Duty: Modern Warfare**
   96.3M hours watched

3. **Counter-Strike: Global Offensive**
   66.5M hours watched

View all streamed games →

There are many more pc games that are very popular outside of the ones available on steam. But games like League of Legends are available worldwide so it can be difficult finding out the DAU.

League of Legends is also a free-to-play game with some in-app purchases. This can make knowing how much they make more difficult, and is a topic to be discussed by professional analysts.

3. Mobile Games - Newzoo data

2019 Global Smartphone Users
Active Smartphone Users per Region | 2019

newzoo

2019 Total
3.3Bn
+7.6%
YoY

293M
9%

289M
9%

521M
16%

378M
12%

1,786M
55%

- North America
- Latin America
- Europe
- Middle East and Africa
- Asia-Pacific
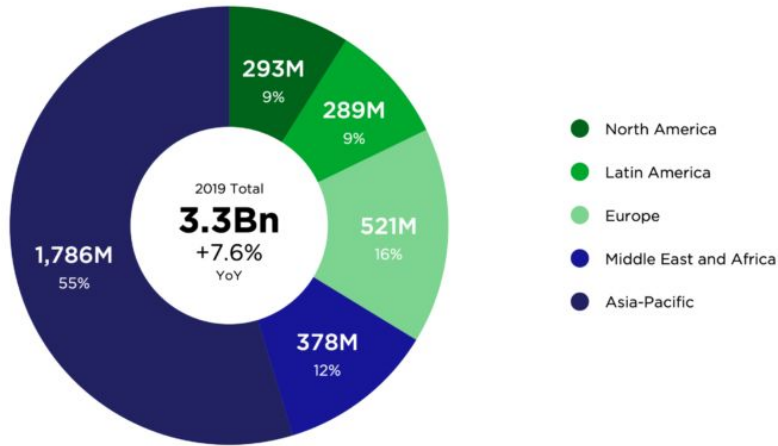
© Copyright Newzoo 2020 | Source: Global Mobile Market Report, March 2020
newzoo.com/global-mobile-report

Mobile phone games are more difficult to track. Everyone has a phone, but not all mobile phone users play games on their phones. And mobile games are often divided into 2 different types:

- Premium games are the ones that have an upfront cost/price and you have to purchase it to be able to play.
- Freemium games are the ones that are free to download, but have in-app purchases.

3. Mobile Games - Premium games (Android)

	Name	price	downloads(in thousands)	earnings(in thousands)
0	Minecraft	6.99	10000	69900.0
1	Monopoly	3.99	100	399.0
2	Stardew Valley	7.99	500	3995.0
3	Bloons TD6	4.99	1000	4990.0
4	Grand Theft Auto: San Andreas	6.99	1000	6990.0
5	Exploding Kittens	1.99	500	995.0
6	The Game of Life	2.99	500	1495.0
7	Geometry Dash	1.99	1000	1990.0
8	Five Nights at Freddys	2.99	1000	2990.0
9	Terraria	4.99	1000	4990.0

While we can't actually get an accurate number of downloads, each page of the app on the google play store gives a rough number of downloads like '100,000+', or '50,000+'.

With that information, we can get a rough estimate on their earnings as well. This does not include in-app purchases however.

The rows with a triangle on the top left indicates that the app contains in-app purchases
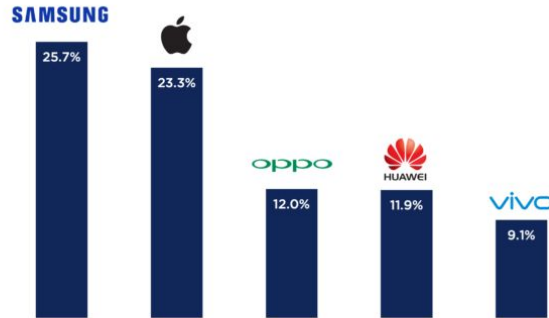
3. Mobile Games - Premium games (Apple)

Apple also plays a huge role in the app market since a lot of people own iphones, but the apple app store does not show proper number of downloads so it's hard to get an estimate, other than seeing the ratings of the apps.

Top Five Smartphone Brands
By Monthly Active Devices | December 2019 | iOS & Android | Global

newzoo

SAMSUNG 25.7%

23.3%

OPPO 12.0%

HUAWEI 11.9%

vivo 9.1%

Apple was the #1 tablet brand with **66.4%** of active tablets used globally in December 2019

Based on the top 100 countries in terms of smartphone users, representing more than 98% of the world's smartphone population. Based on monthly active use in December 2019.

© Copyright Newzoo 2020 | Source: Global Mobile Market Report
newzoo.com/global-mobile-report

Paid

Mojang **Minecraft** ★★★★½ (277,616)		$6.99
Marmalade Game Studio **Monopoly** ★★★★½ (34,205)		$3.99
Ndemic Creations **Plague Inc.** ★★★★★ (99,222)		$0.99
Marmalade Game Studio **The Game of Life** ★★★★½ (19,551)		$2.99
Marmalade Game Studio **Clue: The Classic Mystery Game** ★★★★½ (13,276)		$3.99
Rockstar Games **Grand Theft Auto: San Andreas** ★★★★½ (33,996)		$6.99 +1
2K **NBA 2K20** ★★★½ (3,444)		$5.99 -1
Ninja Kiwi **Bloons TD 6** ★★★★★ (88,822)		$4.99
Exploding Kittens **Exploding Kittens®** ★★★★★ (8,003)		$1.99 +1
Flipline Studios **Papa's Freezeria To Go!** ★★★★½ (1,081)		$0.99 -1

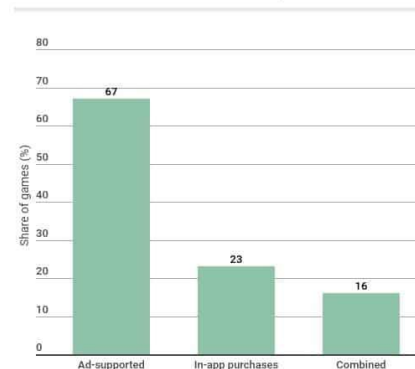# 3. Mobile Games - Freemium games

This is probably one of the biggest and most frequent question when it comes to video games earnings, and one that can be very difficult to answer. "How much does a game that offers in-app purchases often make?".

In 2017, statista's data shows that most of the games available on google play were free games, but they always have some form of way to get some revenue, whether it's from ads or in-app purchases.

(Statista, 2017)

92%
of games that are available on Google Play were **free to download** games

23%
of games that are available on Google Play used **in-app purchases** as a monetization model
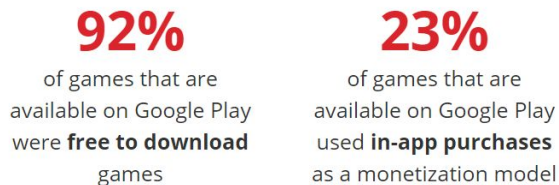
The Share of Free to Download Mobile Game Apps on Google Play Store by Monetization Model (as of December 2016)

Source: Appfigures   Created by WePC.com

3. Mobile Games - Freemium games

Sensor Tower shows an estimated revenue for each apps, but it only shows 1 month before, More options are available, but they requires a business account.

3. Mobile Games - Freemium games (Apple)

With the limited amount of information I can gather, I am only looking at the top 10 top earning freemium games. And these are the numbers for apple store.

	Name	revenue(million)
0	Roblox	37
1	Candy Crush	32
2	Gardenscapes	26
3	Fortnite	16
4	CoD	10
5	Coin Master	17
6	Toon Blast	16
7	PUBG	32
8	Homescapes	22
9	Clash of Clans	24

3. Mobile Games - Freemium games (Android)

These are the numbers for android freemium games.

	Name	revenue(million)
0	Coin Master	39
1	Candy Crush	24
2	Clash of Clans	14
3	Gardenscapes	29
4	Rise of Kingdoms	21
5	Roblox	12
6	Slotomania	13
7	CoD	6
8	Pokemon GO	25
9	Merge Dragons!	7
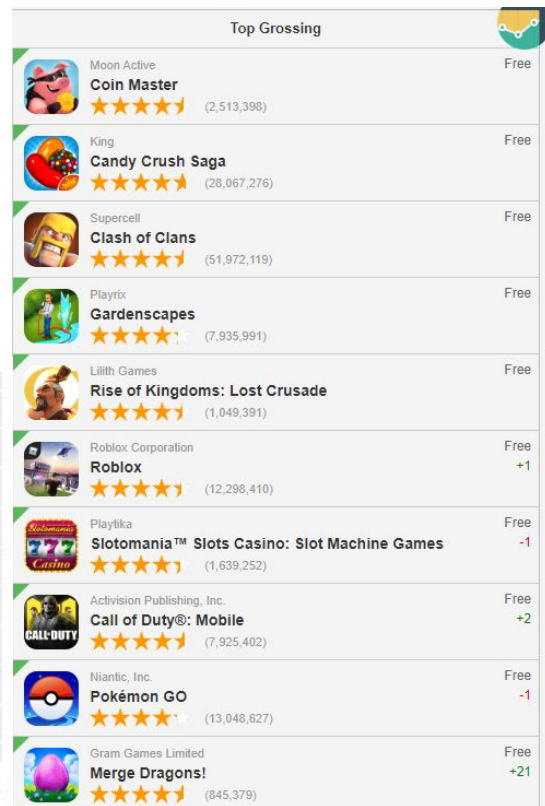
4. Final Numbers?

By looking at just the highest numbers of each platforms, we can do a rough/loose calculation on possible earnings. The numbers below are in millions.
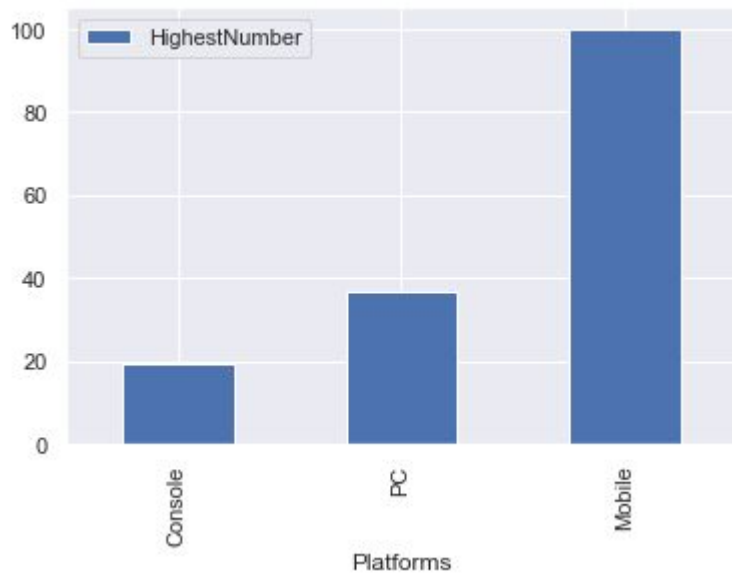
	Platforms	HighestNumber	$50	$25	$10	Actual
0	Console	19.39	969.5	484.75	193.9	1163
1	PC	36.60	1830.0	915.00	366.0	732
2	Mobile	100.00	5000.0	2500.00	1000.0	699~1398

Not really an accurate way of properly getting the numbers of course, but this is just to give a perspective of what was discussed before.

4. Summary

Global Games Market Value (2018)

PC $35.7B
Mobile $68.5B
Console $47.9B

Total
$ 152.1 Bn
+9.6% YoY

Tablet Games | Smartphone Games | Console | Boxed & Downloadable PC games | Browser PC Games
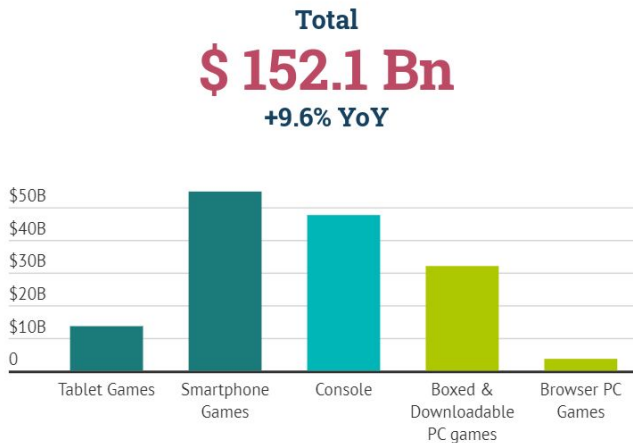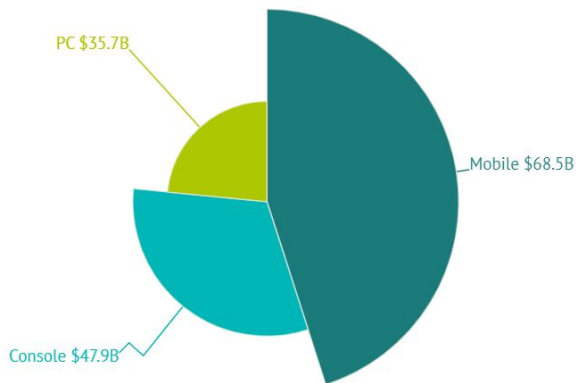
In short, Mobile games is where the money's at.

4. Summary

TOP 10 PUBLIC COMPANIES BY GAME REVENUES

COMPARISON OF 2017 AND 2018 REVENUES ($BN)

● 2017 Revenues ($Bn)   ● 2018 Revenues ($Bn)

Sony, Microsoft, and Nintendo all reported more than
+30%
growth year on year.

Apple and Google's growth was
18% and **22%**
year on year, respectively.

$18.1Bn	$19.7Bn	
$10.1Bn	$14.2Bn	
$7.4Bn	$9.8Bn	
$8.0Bn	$9.5Bn	
$6.5Bn	$6.9Bn	
$5.3Bn	$6.5Bn	
$5.6Bn	$6.2Bn	
$5.1Bn	$5.3Bn	
$3.2Bn	$4.3Bn	
$2.4Bn	$2.7Bn	

©Newzoo 2019

+9% YoY · +41% YoY · +32% YoY · +18% YoY · +6% YoY · +22% YoY · +11% YoY · +4% YoY · +36% YoY · +13% YoY

Tencent · Sony · Microsoft* · Apple* · Activision Blizzard · Google* · NetEase · EA · Nintendo* · Bandai Namco

Foreign exchange rate on January 1, 2018 used for USD amounts

*Estimates of game revenues using quarterly earning reports in which these are not specifically segmented out

Source: Newzoo 2019 | Global Games Market Report | newzoo.com/global-games-market-report

Also, Tencent is the company with the highest revenue when it comes to video game companies According to Newzoo.

5. Insights - Impacts of the Corona Virus

Covid 19 was discovered back in late December, but most of the world only started taking it seriously at around February and March of 2020, where a lockdown was issued and people were forced to stay at home. Many people online are saying that entertainment consumption is on the rise, or at least, going to rise. How true is that? And how do we verify something like this?

5. Insights - Impacts of the Corona Virus

Growth of Weekly Game Installs on China's App Store
Compared to First Week of December 2019

According to Sensor Tower's "Store Intelligence" data, it shows that the chinese app store has been getting a big increase in downloads ever since December of 2019, with a rise of 153%.
Source: https://sensortower.com/blog/china-game-server-blackout

Tencent's Annual Report shows the short term negative impact to their business, but also states that there's been an increased time spent and consumption when people stay at home.
Source:
https://www.tencent.com/attachments/4Q19ResultsPresentation.pdf

Coronavirus Outbreak's Short-term Impact on our Businesses

1. **Mobile Payments**: offline commercial transactions and revenue declined significantly during public holidays, but volume rebounded quickly after work resumes. Reducing marketing expenses limited the negative impact on profitability

2. **Advertising**: despite challenges in certain advertising verticals, our performance-based advertising achieved continued robust YoY growth, driven by high ROI and healthy advertiser mix

3. **Cloud Services**: short-term negative impact on revenue due to delayed implementation of projects; but long-term expansion in industry demand and addressable market as enterprises embrace digital upgrades

4. **Smart industries**: growth in users and traffic to our WeChat Work, Tencent Meeting, Tencent Health and Tencent Education services, inducing increased adoption by consumers and enterprises

5. **Mini Programs**: rise in DAU, daily visits and number of Mini Programs, especially in fresh food & grocery delivery services, municipal services, remote working, online healthcare services and online education

6. **Digital entertainment**: increased time spent and consumption when people stay at home

5. Insights - Impacts of the Corona Virus

Steam has also been hearing some good news ever since December. A new record has been set for the highest number of concurrent user that was set during the lockdown(s).

Steam Sets New Record with Over 23.5 Million Concurrent Users - News

Suka 0   Tweet   Share 62

by William D'Angelo , posted 3 days ago / 1,148 Views

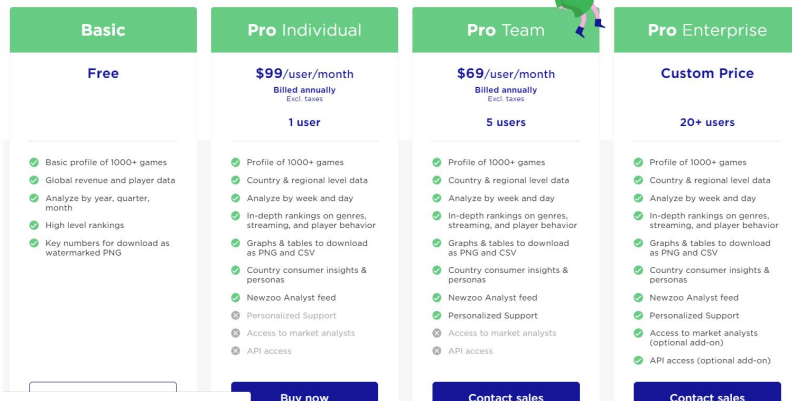Steamdb shows that there's been a 34.3% gain for its player peak ever since last year.

Monthly breakdown

MONTH ▾	PEAK ⇕	GAIN ⇕	% GAIN ⇕	MIN DAILY PEAK ⇕	AVG DAILY PEAK ⇕	IN-GAME PEAK ⇕
Last 30 days	24,156,193	+520,992	+2.2%	16,106,355	20,610,768	7,248,887
March 2020	23,635,201	+4,527,398	+23.7%	16,106,355	19,827,017	7,248,887
February 2020	19,107,803	+772,895	+4.2%	15,846,983	17,046,966	6,079,346
January 2020	18,334,908	+734,166	+4.2%	14,811,064	16,265,412	5,742,563
December 2019	17,600,742	+626,348	+3.7%	14,157,477	15,805,190	5,666,621

5. Insights - How much does "data" cost?

Inside information and analysis on an industry is not always available for free. I've encountered some websites that I used during my research that require additional payments, or subscription to look at the data. But how much do they cost?

What is the price?

Basic	Pro Individual	Pro Team	Pro Enterprise
Free	**$99**/user/month Billed annually Excl. taxes **1 user**	**$69**/user/month Billed annually Excl. taxes **5 users**	**Custom Price** **20+ users**
✓ Basic profile of 1000+ games ✓ Global revenue and player data ✓ Analyze by year, quarter, month ✓ High level rankings ✓ Key numbers for download as watermarked PNG	✓ Profile of 1000+ games ✓ Country & regional level data ✓ Analyze by week and day ✓ In-depth rankings on genres, streaming, and player behavior ✓ Graphs & tables to download as PNG and CSV ✓ Country consumer insights & personas ✓ Newzoo Analyst feed ✓ Personalized Support ✗ Access to market analysts ✗ API access	✓ Profile of 1000+ games ✓ Country & regional level data ✓ Analyze by week and day ✓ In-depth rankings on genres, streaming, and player behavior ✓ Graphs & tables to download as PNG and CSV ✓ Country consumer insights & personas ✓ Newzoo Analyst feed ✓ Personalized Support ✗ Access to market analysts ✗ API access	✓ Profile of 1000+ games ✓ Country & regional level data ✓ Analyze by week and day ✓ In-depth rankings on genres, streaming, and player behavior ✓ Graphs & tables to download as PNG and CSV ✓ Country consumer insights & personas ✓ Newzoo Analyst feed ✓ Personalized Support ✓ Access to market analysts (optional add-on) ✓ API access (optional add-on)
	Buy now	Contact sales	Contact sales

Newzoo, for example, is a website that covers "games market insights", and offers a subscription based access to view some of their deeper informations.

At a glance, it looks like it costs only $99 for a month, but just below it shows that the payment is billed annually, which could mean that it's like a one time payment of $1188 for an individual.

5. Insights - How much does "data" cost?

App Intelligence Pro $79 Per Month App Store Optimization and app monitoring for indie developers. Learn More Start Free 14 Day Trial	App Intelligence Business $399 Per Month App Store Optimization and app monitoring for small businesses. Learn More Start Free 14 Day Trial
App Store & Google Play	App Store & Google Play
5 Apps Tracked	20 Apps Tracked
80 Keywords Tracked	400 Keywords Tracked
Email Alerts	Email Alerts
Email Support	Email Support
Keyword Research	Keyword Research
Keyword Spy	Keyword Spy
Keyword Optimization	Keyword Optimization
	Keyword Suggestion
Month to Month	Annual (25% off)

Another example is "sensortower", which is a website that analyzes the mobile market apps. This service helps with tracking an app's

Also a subscription type, and it costs $79 per month, with a discounted price if it's paid annually. $399 for the "Business" tier.

5. Insights - How much does "data" cost?
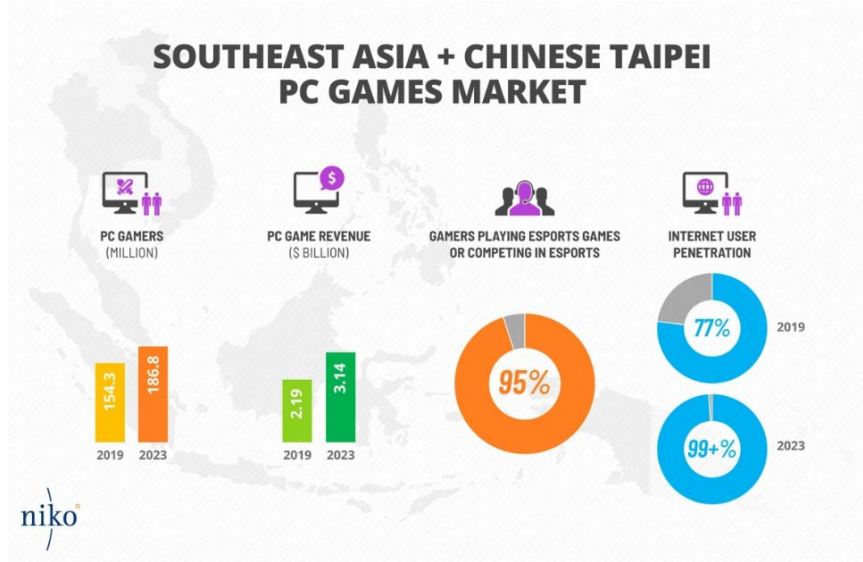
$7,200

Get the Report

View the TOC

Another one that I encountered was this website "nikopartners.com" that covers the market for games in asia.

It's a one time payment of $7,200 to view the report. There are many other reports on the site, and they can go upwards of above $12,000!

TO DASH!