

eSports An Introduction



Source: excelsior.overwatchleague.com



Source: espn.com - Ninja

Table 1

eSports Universe

Public

Private

Publishers - Page 4

Activision Blizzard (ATVI-NASDAQ)

AT&T (T-NASDAQ) *via Warner Interactive*

Bandai Namco (7832-TO)

Capcom (9697-TO)

Electronic Arts (EA-NASDAQ)

Hasbro (HAS-NASDAQ)

Koei Tecmo (3636-TO)

Marvelous Inc. (7844-TO)

Microsoft (MSFT-NASDAQ)

Nintendo (7974-TO)

Sega (6460-TO)

Take-Two Interactive (TTWO-NASDAQ)

Tencent (700-HK) *via Riot*

Ubisoft (UBI-PA)

Arc System Works

Bungie

Epic Games

Psyonix

SNK Corporation

Valve Corporation

Broadcasters - Page 5

Activision Blizzard (ATVI-NASDAQ) *via MLG*Alphabet (GOOG-NASDAQ) *via YouTube*Amazon (AMZN-NASDAQ) *via Twitch*AT&T (T-NASDAQ) *via TBS*

Bilibili (BILI-NASDAQ)

Blackridge Acquisition (BRAC-NASDAQ)

Facebook (FB-NASDAQ)

Huya.com (HUYA-NYSE)

Tencent (700-HK) *via Tencent Video*Walt Disney (DIS-NYSE) *via ESPN*

YY.com (YY-NASDAQ)

Douyu

Youku

Venues - Page 7

Blackridge Acquisition (BRAC-NASDAQ) *via Allied eSports*

Madison Square Garden (MSG-NYSE)

Melco Resorts (MLCO-NASDAQ)

MGM Resorts (MGM-NYSE)

Nexon Co. (3659-TO)

Wagering - Page 8

MGM (MGM-NYSE)

William Hill (WIMHY-LON)

Betway

GG.bet

Ladbrokes

Pinnacle

Unikrn

Tournaments/Leagues - Page 9

Activision Blizzard (ATVI-NASDAQ)

Electronic Arts (EA-NASDAQ)

Gfinity (GFIN-LON)

Take-Two Interactive (TTWO-NASDAQ)

Tencent (700-HK) *via LCS*

Modern Times Group (MTG'B-SK)

NACE

CSL

Evolution Championship

Tespa

Psyonix

Teams/Organizations - Page 12

Madison Square Garden (MSG-NYSE)

Lionsgate Entertainment (LGF.A-NYSE)

NBA 2K Owners

Overwatch League Owners

Many Others (See List)

Source: g.research

What are eSports?

eSports are video games that are played competitively for spectators, by professional gamers. Although video games have been competitively played for as long as they have existed, the eSports market is currently on a growth acceleration path, due to the rapid monetization aspects surrounding it. This is due to many factors, mainly the increased interest and viewership from spectators, and the formation of official leagues and teams for the most popular games. In the following report, we provide a high-level overview of the dynamics surrounding eSports and the involved companies and stocks. For a more in-depth, stock-specific view, please refer to our initiation reports on Activision Blizzard (ATVI-NASDAQ) and Take-Two Interactive (TTWO-NASDAQ).

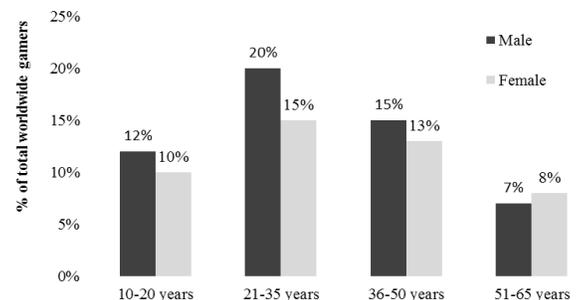
Video Game Market Quick Facts

The video game industry, also referred to as the interactive entertainment industry, is a subset of the entertainment industry and is comprised of companies that are involved with the development, marketing and distribution of video games. Video game content is enjoyed by millions of users across three main platforms: consoles, mobile devices and personal computers.

- The video game industry accounts for around ~6-7% of the \$2.2 trillion global media and entertainment industry (PWC).
- We expect the industry to have global revenue of \$152 billion in 2019, up from \$138 billion in 2018.
- The video game market is the fastest growing form of entertainment, with an expected CAGR of 10% between 2017 and 2021. (For comparison the film industry is expected to only grow at a rate of 3.7% between '17-'21)
- We expect the Asian Pacific Region to account for 54%, or \$82 billion, of the total global gaming industry in 2019.
- 60% of Americans play video games daily (~197 million people). US video game sales reached a record \$43.4 billion in 2018. Software revenue grew 18% YoY and reached \$35.8 billion according to the ESRB.
- The industry is dominated by the age group between 21-35 years old, which accounts for about 35% of the total gaming population.
- The gender demographic of gamers is currently 54% male and 46% female globally.
- In 2017 mobile gaming accounted for 46%, or \$55.9 billion, of the \$121.7 global gaming market. Console gaming accounted for 27% and total PC gaming revenues accounted for 27%.
- By 2021 it is expected that the total mobile gaming market (smartphone and tablets) will account for 59%, or \$106.2 billion of the total industry.

Exhibit 1

Video Gamers Worldwide by Age and Gender - 2017



Source: g.research & newzoo.com

Exhibit 2

Geographic Breakdown of Video Game Revenue (Billions) - 2019E

\$152 Billion Global Industry



Source: g.research & newzoo.com

Top Ten Countries by 2019E Revenue

Rank	Country	Estimated Revenue (Bn)
1	China	\$34
2	United States	32
3	Japan	18
4	South Korea	6
5	Germany	5
6	United Kingdom	5
7	France	3
8	Canada	2
9	Spain	2
10	Italy	2

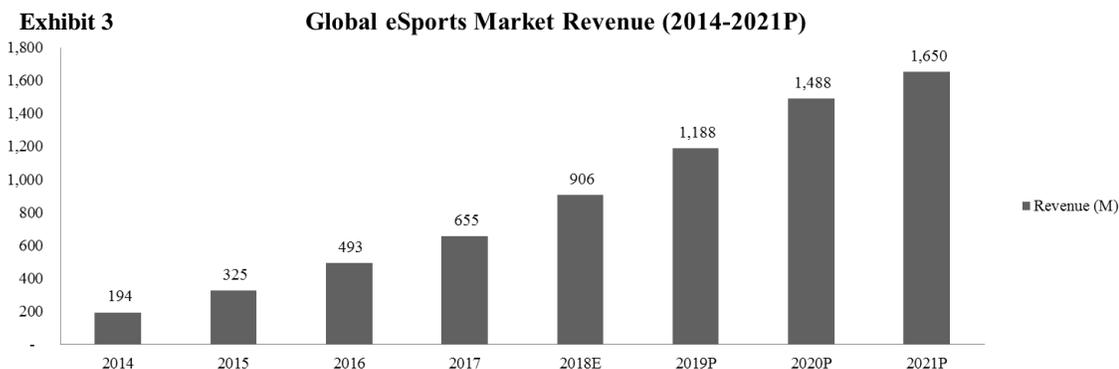
Top 10 - Total **\$109**

Top 10 Market Share

72%

eSports Industry Overview

The eSports industry is expected to grow to \$1.65 billion by 2021, which represents a CAGR of 27% from 2016, when revenue for the industry was \$493 million. The eSports industry is expected to eclipse the \$1 billion dollar mark in 2019. Factors that go into this revenue projection are media rights to broadcast live games, advertisement rights for commercials, sponsorship deals, team merchandise, live event tickets and fees paid to game publishers. Sponsorships range from brands sponsoring individual teams/players, jersey sponsorships, team equipment, official beverages (such as energy drinks), phones/cars and so on. The sponsorship deals are similar to major traditional sport sponsorships.



Source: g.research & newzoo.com

Sponsorships are currently the biggest piece of the eSports revenue pie. Sponsorships accounted for 38% or \$266 million of the total \$696 million industry in 2017, and grew 58% YoY. The eSports industry is dominated by three main markets, North America (38%), China (18%), and South Korea (6%). The three combined markets are expected to account for \$509mm (62%) of total revenue of \$906mm in 2018.

Exhibit 4

eSports Revenue Pie - 2017A		
Segment	Revenue	% of Total
Sponsorships	\$264	38%
Advertising	153	22
Game Publisher Fees	118	17
Media Rights	97	14
Merchandise and Tickets	63	9
Total	\$696	100%

Source: g.research & newzoo.com

Exhibit 5

eSports Revenue Pie - 2021P		
Segment	Revenue	% of Total
Sponsorships	\$578	35%
Advertising	248	15
Game Publisher Fees	83	5
Media Rights	660	40
Merchandise and Tickets	83	5
Total	\$1,650	100%

Source: g.research & newzoo.com

Media rights have become lucrative for eSport competitions, and the hosts of the competitions/owners of the leagues have signed major deals for exclusive broadcasting rights. Activision Blizzard (ATVI) secured a two-year \$90 million deal with Twitch in exchange for exclusive streaming rights for its *Overwatch* eSport League. ATVI also signed an undisclosed deal with Disney XD and ESPN for exclusive broadcasting rights of the league on television. Media rights are the fastest growing subset of the eSport revenue pie and revenue grew 81.5% YoY to \$95.2 million in 2017, and are expected to account for 40% of total industry revenue in 2021.

The Top eSports Games

The popularity of a given eSports title can be measured by viewership hours of professional competitions associated with it. Using this metric, we examine the top ten most-watched eSports games on Twitch and YouTube according to Newzoo, a global games research firm. Altogether, a total of 851 million hours were watched by viewers of organized eSports events in 2018.

Exhibit 6

Most Watched eSports on Twitch & YouTube 2018

Rank	Game Title	Publisher	eSports Hours Watched (mm)
1	League of Legends	Riot Games (Tencent)	240
2	Counter-Strike: Global Offensive	Valve (Private)	212
3	DOTA 2	""	180
4	Overwatch	Activision Blizzard (ATVI)	96
5	Hearthstone	""	43
6	Heroes of the Storm	""	20
7	StarCraft 2	""	18
8	Rainbow Six Siege	Ubisoft (UBI.PA)	15
9	PlayerUnknown's Battlegrounds	Bluehole (Tencent 1.5%)	14
10	Rocket League	Psyonix (Private)	13

Top 10 eSports Total Hours Watched: 851

Source: g.research & newzoo.com

Who makes these games?

Many of the top eSports are developed and published by the big name publicly traded companies. Other eSports are developed by both small and large private developers/publishers. Below are the most notable publishers/developers in the eSports industry and each respective eSport game. Private developers include Bungie, Epic, Psyonix & Valve.

We rubric eSports titles into six main categories: 1) fighting games, 2) real-time strategy, 3) traditional first-person shooters, 4) Multiplayer Online Battle Arenas (MOBAs), 5) arcade/simulation sports, and 6) card games.

- 1) **Fighting**: Technically-oriented combat with unique characters in a virtual environment; originated in arcades
- 2) **Real Time Strategy (RTS)**: Build and control a faction's military and economy to dominate a virtual map
- 3) **Traditional First Person Shooters (FPS)**: POV combat, usually with modern or science-fiction weapons
- 4) **Multiplayer Online Battle Arenas (MOBAs)**: Descendent of RTS, team members play unique positions or "roles"
- 5) **Sports**: Simulation of traditional sports game or fantastic derivative thereof e.g. soccer with jet-boosted cars
- 6) **Card**: Players select limited decks of cards from a database and strategically play them against each other

Table 2

Public eSport Publishers		eSport Categories					
Company	Ticker	1) Fighting	2) RTS	3) FPS	4) MOBA	5) Sports	6) Card
Activision Blizzard	ATVI		<i>StarCraft</i>	<i>Call of Duty</i>	<i>Overwatch, HotS</i>		<i>Hearthstone</i>
AT&T	T	<i>Mortal Kombat</i>					
Bandai Namco	Bandai	<i>DragonBall</i>					
Capcom	Capcom	<i>Street Fighter</i>					
Electronic Arts	EA		<i>Command & Conquer</i>	<i>Battlefield</i>		<i>FIFA, Madden, NHL</i>	
Hasbro	HAS						<i>MtG: Online</i>
Koei Tecmo	3635-TO	<i>Dead or Alive</i>					
Marvelous Inc.	7844-TO	<i>Skullgirls</i>					
Microsoft	MSFT	<i>Killer Instinct</i>	<i>Age of Empires</i>				
Nintendo	NTDOY	<i>Super Smash Bros.</i>		<i>Splatoon</i>			
Sega	6460-TO	<i>Virtua Fighter</i>	<i>Company of Heroes</i>				
Take-Two Interactive	TTWO					<i>NBA 2K</i>	
Tencent	TCEHY			<i>Fortnite</i>	<i>LoL, Arena of Valor</i>		
Ubisoft	UBI-PA			<i>R6: Siege</i>			

Private eSport Publishers		eSport Categories					
Company	Ticker	1) Fighting	2) RTS	3) FPS	4) MOBA	5) Sports	6) Card
Arc System Works	-	<i>BlazBlue</i>					
Bungie	-			<i>Halo</i>			
Epic	-			<i>Fortnite, Unreal</i>			
Psyonix	-					<i>Rocket League</i>	
SNK Corp.	-	<i>King of Fighters</i>					
Valve Corp	-			<i>CounterStrike</i>	<i>DotA 2</i>		

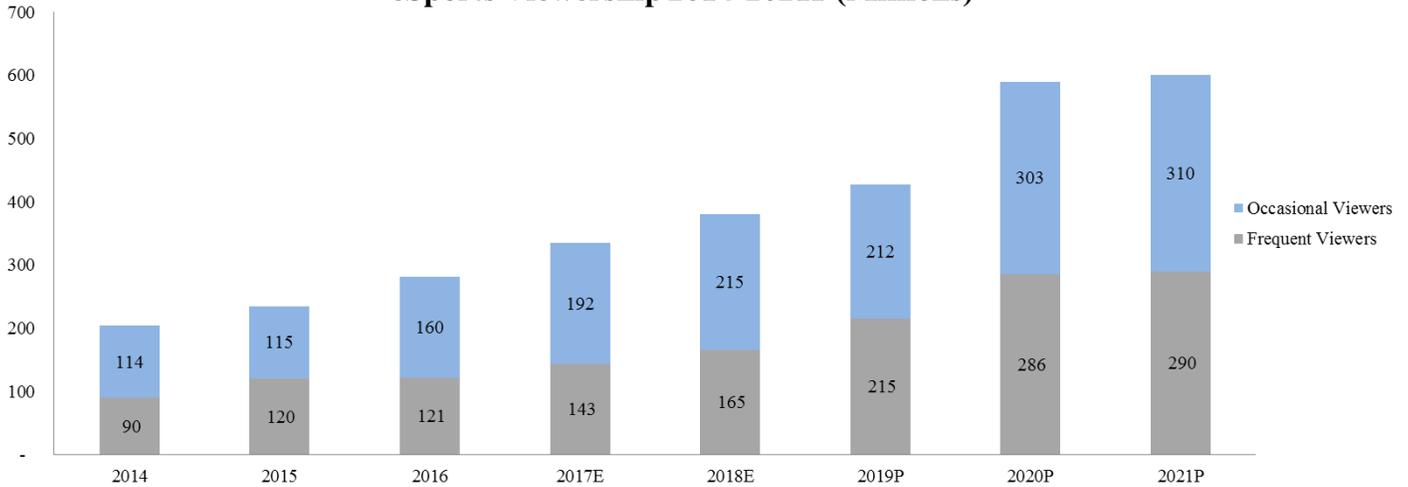
Source: g.research

So...who is watching eSports?

In 2016, there were 281 million viewers of all types of eSports, with 121 million, or 43% of those being “eSports enthusiasts.” Total audience grew 19% YoY from 2016 to 2017, and is expected to increase 14% YoY growing the total expected audience for 2018 to 380 million. By 2021 we expect that total viewership for eSports will be around 600 million, representing a 16% CAGR from 2016. 51% of current eSport viewers are from the APAC region (dominated by China and South Korea), 18% from the EU, 13% from North America, and 18% from the rest of the world.

Exhibit 7

eSports Viewership 2014-2021P (Millions)

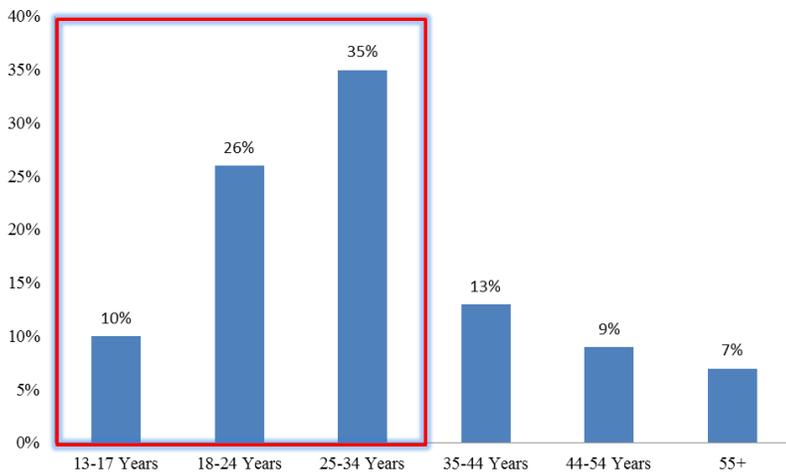


Source: g.research estimates & statista.com

The increase in both revenue and viewership figures for the industry stems from the increasing popularity of eSports and video games with the younger generations. The young demographics of eSport viewers is in an attractive prospect for major consumer and tech brands, and has fueled the growing advertising and sponsorship deals within the eSports world. 36% of eSport viewers are under the age of 24, and 71% are under 35 years old. Males make up about 77% of total eSports viewership, with women representing 23%. eSports viewers are significantly younger than the fans of traditional sport leagues such as the MLB (avg. 57 years old), and the NFL (50). The key is that the main eSport viewers are millennial males with a disposable income and a proven propensity to spend money on video game related content.

Exhibit 8

eSports Viewership by Age



Source: g.research & statista.com

Exhibit 9

Average Age of Sports Audiences (2016)

Sport	Average Age
PGA Tour	64
ATP Tennis	61
NASCAR	58
MLB	57
NFL	50
Boxing	49
NHL	49
NBA	42
MLS	40
eSports	31

Source: g.research & Sports Business Journal

Live Streamers – Fueling Viewership

People who live stream their video game play, either by hobby or profession, are known as streamers. The practice became popular in the mid-2010s on sites such as Twitch and, later, YouTube. By 2014, Twitch streams had more traffic than HBO's online service. The audience on Twitch and YouTube is larger than HBO, Netflix & ESPN combined. Professional streamers often combine high-level play and entertaining commentary, and earn income from advertising, subscriptions, and donations.

The game streaming universe is dominated by Twitch and YouTube. Twitch is a live streaming video platform wholly owned by Amazon. Users can watch live gamers play, and can pay to subscribe to channels if they like the content. YouTube is a video sharing website that is a subsidiary of Google. For 2017, the average viewership at any given point for Twitch was 962,000. For comparison, in 2017 Fox News and ESPN had an average viewership of 1.5 million, while CNN had 788,000.

YouTube Live Gaming was a distant second with 308,000 average users. Both Twitch and YouTube's streaming platforms are meant for leisure gamers and competitive gaming alike. Another competitor to the two giants is Activision Blizzard owned Major League Gaming (MLG). MLG is a professional eSports organization that hosts competitions around the world for competitive gamers. MLG also streams these competitions on its website for viewers to watch live, or after the competition is over. In 2015, MLG stated it provided high-quality competitions that reached 27 million engaged fans each month. In 2016 MLG was acquired by Activision Blizzard for a reported eSports \$46 million, according to the eSports Observer.

Ninja – The LeBron of Gaming:

Ninja (Tyler Blevins) is a popular video game streamer who offers his content on both Twitch and YouTube. As of November 2018, he is the most popular video game streamer on Twitch. He has over 13 million followers on Twitch, and has an average of around 53,000 viewers per stream. This equates to around ~5% of Twitch's average daily traffic. He often brings famous athletes and music stars onto his streams, which can boost his viewership to over 500,000 at a given time.

In April 2018, Ninja set the Twitch single viewership record of 667,000, when he streamed his live eSports competition in the Luxor Hotel and Casino in Las Vegas (hosted by Allied eSports). Besides on Twitch, Ninja is very prominent on YouTube, with over 21 million subscribers. Ninja confirmed to a Forbes contributor that he earns over \$500,000 per month alone streaming *Fortnite* on Twitch, based on his paid subscriber count. On Monday March, 19th 2018, Ninja appeared on CNBC's prime time segment, *Squawk Alley*, to discuss the rise of streaming and eSports. Ninja became the first eSports player to be featured on the cover of ESPN The Magazine in October 2018.

Ninja has pioneered eSports and video games into the mainstream world. He is now seen as the face of the video game industry, and is a role model for many aspiring professional gamers and streamers.



Source: g.research & statista.com

Exhibit 10

Most Followed Twitch Streamers

Jan-19

Rank	Streamer	Major Game	Followers
1	Ninja	<i>Fortnite</i> (Tencent 40%)	13,00,000
2	Shroud	<i>Black Ops 4</i> (ATVI)	5,00,000
3	tsm_myth	<i>Fortnite</i> (Tencent 40%)	4,70,000
4	Tfue	""	4,50,000
5	summit1g	<i>Black Ops 4</i> (ATVI)	3,50,000
6	riotgames	<i>League of Legends</i> (Tencent)	3,30,000
7	dakotaz	<i>Fortnite</i> (Tencent 40%)	3,30,000
8	TimTheTatman	""	3,20,000
9	TSM_Daequan	""	3,20,000
10	DrDisrespect	""	3,00,000

Source: g.research & twitchmetrics.net

eSports vs. Traditional “Sports”

A good way to put the size of eSports viewership in perspective is to compare major eSports events to major United States Sporting Finals. The most popular sports leagues in the United State by championship viewership are the NFL, NBA, MLB, PGA Tour, and the NHL. All of the leagues mentioned have had a strong following in the United States for decades, and are heavily rooted into the culture of the country. eSports on the other hand, are a recent phenomenon that have not had the time and exposure the other leagues have had to grow. Despite this, viewership for major eSports events eclipsed all major sports with the exception of Super Bowl LII in 2018. The combined prize pools for the top ten eSport games around the world reached over \$130 million, with the biggest pool (\$41 million) coming from *Dota 2* competitions.

The premier eSports event is the *League of Legends* World Championship, which had 100 million unique viewers in 2018, up 43% from 70 million viewers for the 2017 World Championship event. Average concurrent viewership (CCV) for the top four eSports events in 2018 was 30 million, as compared to the 37 million for the top four sporting events in the United States. Excluding the biggest events in each category (*LoL Champs* & *the Super Bowl*) average CCV for the top eSports events was 25 million vs. US sporting finals which had an average CCV of 15 million.

Exhibit 11

2018 eSports Events vs. US Final Sporting Events			
2018 Major eSports Event	Avg. Viewers (mm)	2018 Major US Sports Final Event	Avg. Viewers (mm)
<i>League of Legends</i> Championship	47	Super Bowl LII	103
<i>League of Legends</i> Mid-Season	25	2018 NBA Finals	18
LPL Spring Playoffs	32	2018 World Series	14
<i>PUBG</i> Global Invitational	17	2018 Masters Final Round	13
Average Unique Concurrent Viewers	30	Average Unique Concurrent Viewers	37

Source: g.research, Riot Games, ESL, Statista, USA Today

The League of Legends 2018 championship became the most watched eSports event in history. The event was held on November 3, 2018 in South Korea. The best of five matchup between Chinese Invictus Gaming and UK based Fnatic attracted an audience of 99.6 million unique viewers, with peak concurrent viewers reaching 44 million. The finals event was broadcasted in 19 different languages across more than 30 platforms and TV channels. The prize pool for the tournament reached \$6 million, making it the largest in League’s history.

As a direct result of the increased viewership in eSports events, public and private companies have looked to capitalize on the live entertainment aspect by building eSports stadiums/arenas. Ticket sales and eSports betting have fueled the development of pure eSports arenas, especially in Las Vegas. A recent example of this occurred in 2017 when MGM Resorts and Casinos announced it was building the Las Vegas Strip’s first eSports venue at the Luxor Hotel. The arena has been completed and opened in March 2018. It is a 30,000 square foot multi-level arena that features a competition stage, 50-foot LED video wall, telescopic seating and PC/Console gaming stations. Hong Kong based Melco Resorts & Entertainment (MLCO) announced it will be opening its first eSports venue, the Macau Stadium, at its Studio City Casino in the heart of the Coati Strip.



Source: Businesswire

Exhibit 12

Largest Live eSports Events in History by Attendance

Rank	Attendance	Event	Year
1	169,000	ESL One / IEM Katowice	2018
2	52,000	ESL One DOTA 2	2015
3	45,000	League of Legends World Finals	2014
4	22,000	Overwatch League Finals	2018
5	12,500	ESL Intel Extreme Masters	2015

Source: Betoclock.com

Exhibit 13 2018 eSport Prize Pools by Game

Rank	Prize Pool	Game	Publisher
1	\$41,260,000	<i>DOTA 2</i>	Valve Corp
2	22,470,000	<i>CS:GO</i>	""
3	19,960,000	<i>Fortnite</i>	Epic Games
4	14,120,000	<i>League of Legends</i>	Riot Games
5	6,730,000	<i>PUBG</i>	Bluehole
6	6,700,000	<i>Overwatch</i>	Activision Blizzard
7	6,520,000	<i>Heroes of the Storm</i>	""
8	4,950,000	<i>Hearthstone</i>	""
9	4,530,000	<i>StarCraft II</i>	""
10	4,170,000	<i>Call of Duty: WWII</i>	""
Total	\$131,410,000		Source: esportsobserver.com

eSports & Wagering

Gambling and betting on eSports matches in the United States had been illegal under PASPA since 1992. The act prevented all but five states from allowing gambling on sporting events. However regulation of eSports betting still depends on state law. In Nevada, where sports betting is exempt under PAFSA, some betting houses classify eSports as non-competitive other events similar to betting on events like the winner of the Heisman Trophy. Nevada legalized eSports betting in June 2017, classifying eSports alongside traditional competitive sports. In May 2018, when the Supreme Court found that PAFSA was unconstitutional, it ruled that the federal government cannot limit states from regulating sports betting. This has created the potential for legalized eSports betting in the United States.

The worldwide eSports betting market is much more mature than it is in the United States. Software Analytics Company and research firm Eilers & Krejciek Gaming, project that worldwide gambling on eSports will be \$6.7 billion in 2018. The same report by the two firms projects that the total eSports betting industry will grow to \$13 billion by 2020. Investing in the eSports gambling world has already started, and major sports figures such as Mark Cuban have invested. Cuban as well as Shari Redstone, Elisabeth Murdoch and Ashton Kutcher, invested in a company called Unikrn, which sets lines and takes wagers from around the world on eSports competitions. Unikrn has raised over \$40 million in funding since its inception in 2014. Other major players in the eSports gambling industry are Betway, Pinnacle, William Hill (WIMHY), Ladbrokes and GG.bet.



Source: *Esports Observer*

Casinos in the United States are expected to embrace eSports in the near future as 82% of commercial casino stakeholders believe that regional casinos should explore eSports events (Eilers & Krejciek Report). The Downtown Grand became the first casino in the US to implement a permanent eSports lounge in 2016. The lounge hosts weekly competitions with cash prizes. MGM followed suit soon after, and both the Luxor and Aria casinos launched eSports studios in the early part of 2018.

Daily fantasy sports provider DraftKings added the popular *League of Legends* to its fantasy sports offerings in 2015. Contestants draft teams of gamers and earn points based on the gamer's performances, just as in the way fantasy football or hockey works. The total prize pool for *League of Legends* on DraftKings in 2015 was over \$1 billion.



Source: *Draftkings.com*

The main drivers behind the current and future growth of eSports betting:

- **Attractive Audience:** Core eSports enthusiasts are in their late twenties to early thirties. The core group has disposable income (as gaming is not a cheap hobby) and have a proven propensity to gamble. The appeal of this much desired demographic will likely drive both established sportsbooks and new eSports focused betting sites to invest heavily in eSports related wager products.
- **Cross-Selling Potential:** Some evidence from established sportsbooks indicates that current websites that offer eSports products have greater cross-selling potential for traditional sports betting and various types of casino play. If the evidence builds in the near-term, many sportsbooks may look to ramp up efforts to add eSports products to enhance the chance for the coveted eSports betters to cross bet on sports such as football and soccer, in addition to casino games like blackjack and poker.
- **Simple Implementation:** Current sportsbooks will have to do little to fully integrate eSports betting lines on websites. eSports in theory are just another sport, so implementing lines on video game competitions will be relatively seamless for operators. The one major risk to neat implementation is the requirement for better access to accurate tournament and player data for bookmakers to set realistic and fair lines. A common standard of eSports collection data will need to be created across all games.

eSport Leagues

There are two types of major professional eSport leagues:

1. Leagues that are owned and operated by game publishers such as the *Overwatch* League & *NBA 2K* League
2. Leagues operated by third party companies such as the Electronic Sports League (ESL) or collegiate leagues.

Overwatch League: Activision Blizzard, which owns the game *Overwatch* and its respective competitive league, sold the franchise rights for twelve teams in 2017 for a speculated (back-end adjusted) \$20+ million, to the likes Robert Kraft, the owner of the New England Patriots, Sterling.VC (supported by NY Mets owner), and Kroenke Sports & Entertainment (Arsenal FC, Los Angeles Rams and Denver Nuggets). Eight new teams have been added to the league for its second season, and speculated prices for new franchise rights have been speculated to be around \$50 million (+\$30 million increase per team).



Source: Blizzard

The *Overwatch* League follows the model of a traditional North American professional sports league, using permanent city-based teams and regular season play. Each team is backed by an owner, and players sign with the team at a minimum salary (\$50,000), with benefits and a portion of the team's winnings. The league had a total prize pool of \$3.5 million in 2017 after the first season. The *Overwatch* League grand finale match was held in the Brooklyn Nets' Barclays Center on July 27th and 28th, 2018. The 20,000 tickets for the event sold out within two weeks of its public on-sale date. Blizzard announced that there were 10.8 million unique viewers for the finals.

In early January 2018, Activision Blizzard struck a deal with Twitch, the leading live game streaming platform in the world, for a reported \$90 million, to have the rights to broadcast the league live on its website. This is believed to be the biggest exclusive distribution deal in eSports history. On July 11, 2018, Activision Blizzard signed a multiyear exclusive telecast agreement for the *Overwatch* League, with ESPN and Disney XD.

NBA 2K League: Take-Two has been one of the first major game publishers to create its own league based on its franchise *NBA 2K*. The *NBA 2K* League (2K League) is an eSports league joint venture between the National Basketball Association and Take-Two. The league was officially announced on February 9th, 2017 and its inaugural season began on May 1, 2018. Seventeen of the thirty NBA teams had its own *NBA 2K* League team during the inaugural season. The league and Twitch announced a multiyear partnership in April 2018 to live stream all of the league's games.

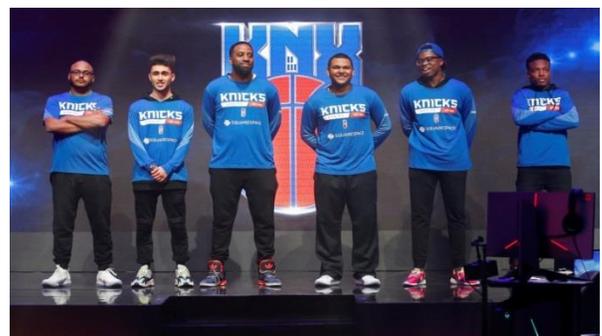


Source: Forbes

The league uses a Pro-Am structure mode for the games, which consists of a 5v5 team matchup. Each team follows a traditional NBA team with a point guard, shooting guard, small forward, power forward and a center. The regular season consisted of 12 weeks of weekly matchups which culminated in a postseason. The playoff prize pool was a total of \$600,000, with \$300,000 coming from the league championship. The inaugural season used a snake draft format with the NBA commissioner Adam Silver announcing the first pick of the draft. The draft took place at Madison Square Garden (MSG) and consisted of five rounds.



NBA 2K League Draft at MSG



NBA 2K League 2017-2018 Champions – Knicks Gaming

ESL (Electronic Sports League): The ESL is an eSports organizer and production company that hosts and produces eSport competitions worldwide. The German based company is the largest eSports company to broadcast on Twitch. In 2015 the Swedish based Modern Times Group (MTG'B - SK), purchased a 74% majority stake in the ESL for \$86.4 million, which marked the first time a traditional media company purchased an eSports company. Unlike the *Overwatch League* and the *NBA 2K League*, the ESL hosts a variety of different game competitions (instead of a one game league) by partnering with publishers such as Blizzard, Riot Games, Ubisoft, Valve and Microsoft. The ESL has different types of platforms highlighted below for various types of games and skill based competitions.

- **ESL Play:** hosts tournaments and ladders across all games and skill levels including amateur leagues.
- **The ESL Pro Leagues:** hosts 9 official Pro Leagues for games such as *Overwatch*, *Counter-Strike: Global Offensive*, *Rocket League*, *Hearthstone* and *Tom Clancy's Rainbow Six Siege*.
- **ESL National Championships:** hosts region-specific ESL Pro competitions in different countries for games such as *Battlefield*, *Counter-Strike*, *Dota 2* and *Halo*.
- **ESL One:** is the platform for premier offline tournaments across a variety of games. The ESL One events for games like *Counter-Strike* and *Dota 2* are considered the most prestigious events for each game.
- **Intel Extreme Masters:** is the world's longest-running global eSports tournament series. The events are ESL sanctioned events that are sponsored by Intel (INTC) and host major eSport games such as *League of Legends*, *Counter-Strike*, and *Hearthstone*. Intel Extreme Masters events are some of the most attended eSport events in the industry with its 2016 final event attracting 113,000 fans to the Spodek arena over the course of the three day event. The league has existed for twelve season and events have been held in Poland, the United States, China, Dubai and Germany. Intel and ESL announced on December 13, 2018 that they have extended their partnership which will result in \$100 million invested in eSports initiatives through 2021.

The ESL is one of the most successful eSports league operators and has held 3 out of the top 5 most attended eSports events in history (ESL IEM Katowice, ESL One Dota 2 & ESL Intel Extreme Masters). In addition, ESL has partnered with companies such as Facebook (FB) and Twitch (AMZN) to stream its diverse list of competitions on each respective platform.

ESL is set to be a held under a standalone pure-play eSports company when the publicly traded MTG splits in two. The standalone company will be named Modern Times Group (MTG AB), which will comprise of the ESL, DreamHack, the ESEA League and Kongregate Games.



Source: *Esports Insider* – ESL IEM Katowice 2018

College eSports

Organized collegiate eSports play has begun to emerge at universities across the United States and Canada. University students, which would be grouped in the 18-24 age demographic, represent 26% of interactive entertainment users. Traditionally before the organization of collegiate eSports leagues and clubs, competitions were limited to publishers sponsoring its own tournaments and selecting university students by hand to compete for scholarship/prize money. There are currently several organizations consolidating the collegiate eSports space which organize competitive play and scholarships for 1,000+ universities and colleges.

This includes a growing amount of students being recruited exclusively for their eSports ability. Varsity collegiate eSports began in 2014 when Robert Morris University in Illinois announced a scholarship program to develop a *League of Legends* team. Since then, collegiate eSports has grown rapidly to over 100 programs, with a governing body known as the National Association of Collegiate eSports, which has become home to most of the collegiate organizations.

Collegiate eSports Organizations

National Association of Collegiate eSports (NACE)

The National Association of Collegiate eSports is a non-profit organization comprised 80 varsity eSports programs. NACE has helped distribute \$9 million of scholarship grants to over 1,500 eSports student athletes since 2017. As of January 2018, over 90% of all varsity eSports programs in the US are members of NACE.

Collegiate Star League (CSL)

The Collegiate Star League is a competitive club collegiate league represented by US and Canadian colleges. Since 2009, the CSL has grown to 900 member universities with several divisions and support for competitive play on popularized eSports games such as *StarCraft II*, *Counter-Strike*, *Rocket League*, *DOTA II*, and *League of Legends*.

Tespa

Tespa is a North-American eSports competition organizer that officially partnered with Activision Blizzard in 2013. Tespa currently includes 270+ member schools in North-America, and over 102,000 students have participated in Tespa sponsored competitions.



Source: Miami University



Source: Study Breaks Magazine

In full effect, a mature collegiate eSports environment could support professional eSports similarly to how farm teams and winter leagues support the MLB. A mature collegiate eSports environment could also help foster and grow interest in eSports among college students and possibly instill a sense of locality, school pride and loyalty into a sport with intrinsically unlimited geographic reach.

Private Professional eSport Organizations

According to PitchBook, there were 74 major investments in the eSports world in 2017, with the majority of them coming from angel and venture capital investors. The 74 deals were worth a combined \$1.52 billion, which is up from six deals worth \$34 million in 2008. As of October 23, 2018, there had been 63 deals in the eSport space worth a total of \$2.34 billion, an increase of 54% from 2017. eSport companies that are factored into the figures above can range from teams to eSport betting websites to streaming platforms. Forbes compiled a list of the 12 most valuable private eSport companies in the world by talking to owners, bankers and industry experts. The appraisals applied to the companies are based on the valuations that were applied during each company's latest capital raise.

Cloud9 is the most valuable professional eSports company due to its success in a wide variety of games. The US based company raised \$50 million in series B funding in its most recent round, and a piece of the funding will be put toward the construction of a 20,000-30,000 sqft training facility for the team.

Team SoloMid is the second most valuable eSport organization in the world mainly due to its dominance in the world's biggest eSport, *League of Legends*. The North American (NA) based team is the most successful NA based *League of Legends* team with six championships.

100 Thieves made a relatively late entry to the eSports industry when it was founded in November 2017 by former *Call of Duty Pro* Matthew "Nadeshot" Haag. The organization received a multimillion-dollar investment from Cleveland Cavaliers owner Dan Gilbert and a later investment from actor and musician Aubrey "Drake" Graham. Despite the organization's relatively recent entry into the eSports circuit, it has found early success with its *League of Legends* team making it to the 2018 World Championships. The instant success has helped the organization receive a \$90 million valuation, making it the 11th most valuable organization in the eSports world.



Source: Wall Street Journal – Nadeshot and Drake 100 Thieves

Many of the top 12 eSports organizations have received investments from well-known traditional sports figures and athletes, who are looking for new ways to expand their influence in the "new" sports world. Some of the sport titans who have entered the eSports industry through investments are:

- Michael Jordan – member of a \$26 million funding round in Team Liquid
- Stephen Curry, Andrew Iguodala & Steve Young – Members of a \$37 million funding round in TSM
- Kevin Durant & Odell Beckham Jr. – Member of a \$36 million funding round in Vision eSports (Echo Fox)
- Dan Gilbert – Led a multimillion investment in 100 Thieves
- Madison Square Garden (Knicks, Rangers, Liberty) – Acquired a controlling stake in Counter Logic in 2017

Table 3 The World's Most Valuable eSports Companies - Forbes 2018

Rank	Company	Owners	Value (mm)	Revenue (mm)	Revenue Multiple	# of Teams
1	Cloud9	Jack & Paullie Etienne	\$310	22	14x	11
2	Team SoloMid	Andy Dinh	250	25	10x	7
3	Team Liquid	aXiomatic	200	17	12x	14
4	Echo Fox	Vision Venture Partners	150	11	14x	8
5	OpTic Gaming	Infinite eSports & Entertainment	130	10	13x	6
6	Fnatic	Sam and Anne Matthews	120	11	11x	11
7	Gen G. eSports	Kevin Chou, Kent Wakeford	110	12	9x	7
8	G2 eSports	Carlos Santiago, Jens Hilger	105	8	13x	11
9	Immortals	Noah Whinston, Meg Whitman	100	5	20x	4
10	Envy Gaming	Mike Rufail, Ken Hersh	95	5	19x	7
11	100 Thieves	Matthew Haag, Drake, Dan Gilbert	90	5	18x	4
12	Counter Logic Gaming	Madison Square Garden (MSG)	50	4	13x	7

Source: g.research & Forbes

Companies Mentioned:

Activision Blizzard	(ATVI - NASDAQ)	Madison Square Garden	(MSG - NYSE)
Alphabet	(GOOG - NASDAQ)	Marvelous Inc.	(7844 - TO)
Amazon	(AMZN - NASDAQ)	Melco Resorts	(MLCO - NASDAQ)
AT&T	(T - NYSE)	MGM Resorts International	(MGM - NYSE)
Bandai Namco	(7832 - TO)	Microsoft	(MSFT - NASDAQ)
Bilibili	(BILI - NASDAQ)	Modern Times Group	(MTG'B - SK)
Blackridge Acquisition	(BRAC - NASDAQ)	Netflix	(NFLX - NASDAQ)
Capcom	(9697 - TO)	Nexon Co.	(3659 - TO)
Electronic Arts	(EA - NASDAQ)	Nintendo	(7974 - TO)
Facebook	(FB - NASDAQ)	Sega	(6460 - TO)
Gfinity	(GFIN - LON)	Take-Two Interactive	(TTWO - NASDAQ)
Hasbro	(HAS - NASDAQ)	Tencent	(700 - HK)
Huya.com	(HUYA - NYSE)	The Walt Disney Company	(DIS - NYSE)
Intel Corp.	(INTC - NASDAQ)	Ubisoft Entertainment	(UBI - PA)
Koei Tecmo	(3636 - TO)	William Hill	(WHM - LON)
Lionsgate Entertainment	(LGF.A - NYSE)	YY.com	(YY - NASDAQ)

I, **Alec M. Boccanfuso**, the Research Analyst who prepared this report, hereby certify that the views expressed in this report accurately reflect the analyst's personal views about the subject companies and their securities. The Research Analyst has not been, is not and will not be receiving direct or indirect compensation for expressing the specific recommendation or view in this report.

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Analysts' ratings are largely (but not always) determined by our "private market value," or PMV methodology. Our basic goal is to understand in absolute terms what a rational, strategic buyer would pay for an asset in an open, arms-length transaction. At the same time, analysts also look for underlying catalysts that could encourage those private market values to surface.

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A **Sell** is a stock that may be trading at or above our estimated PMV. There may be little upside to the value, or limited opportunity to realize the value. Economic or sector risk could also be increasing.

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