

Canadian Equity Research

12 February 2019

Canaccord Genuity Corp. (Canada)

Robert Young, MBA | Analyst -
1.416.869.7341
ryoung@cgf.com

Doug Taylor, CFA | Analyst - 1.416.867.6101
dtaylor@cgf.com

Christian Sgro, CFA | Associate -
1.416.869.7364
csgro@cgf.com

Brendan Chong | Associate - 1.416.869.7375
bchong@cgf.com

Industry Update

Esports: Investment landscape in 2019

Esports audiences are larger than most people think; they are global and they are growing, driving interest from mainstream brands looking for ways to engage a younger crowd. We acknowledge that esports is still progressing through the hype stage, but the raw figures are compelling. Much of the pure play opportunity has been limited to the private domain where sports team owners, professional athletes and other celebrities - or in other words, those with experience building an audience - have been active. As the theme of esports matures and as investment opportunities spread beyond large video game studios, GPU vendors, and a handful of pure play publicly traded securities, we believe investors should pay attention.

The esports sector is characterized by global reach and impressive CAGRs (viewership +14.4%, revenues +27.4% through to 2021 per Newzoo). We expect media interest and sponsorship deals will drive continued growth. If you haven't dug into this emerging segment before, and you haven't already read our [previous research](#), skip to the back and read Appendix 2 to get a foundation. This report analyzes opportunities for investment, esports team economics, and other angles to play the growth.

In search of the pure play: Esports teams evolving under the league franchise model

In the North American private sector, esports teams have attracted significant interest from corporate and strategic investors. We have segmented these stakeholders into three broad cohorts: corporate & institutional, traditional sports franchises, and entertainment & former athletes. The League of Legends and Overwatch franchises have been innovative in their development of localized teams, but the economics remain unproven and valuations ambiguous as much of the information is private.

Esports betting 101

An often-overlooked beneficiary is the online esports gambling sector, which we believe is poised to grow in stride. Esports gambling websites benefit from being agnostic regarding the publisher, IP issues, and game popularity - we believe esports gambling will grow steadily alongside the broad esports sector. Several established online gambling companies are adding esports betting options while independent organizations are leveraging their endemic knowledge of the space to gain traction. With an estimated US\$6.7B total money wagered in 2018, this subsector is becoming difficult to ignore.

Companies in focus

We have provided company profiles on the following 10 emerging North American esports companies, in Appendix 1. We segment these companies into three groups: teams, gambling websites, and media & entertainment. These companies will be in attendance at our upcoming esports one-on-one conference on February 21 in Toronto. Please join us and contact your Canaccord Genuity representative for details.

- Aquilini Group
- Askott Entertainment
- Ateyo
- aXiomatic (Team Liquid)
- Beyond the Summit
- Cineplex (CGX-TSX)
- Enthusiast Gaming (EGLX-TSXV)
- OverActive Media
- PMML Corp. (Rivalry)
- Reciprocity

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Sector summary and update

Investment in the sector in 2018

Since our esports publication in May 2018, the esports industry has been evolving rapidly but the themes have not changed. Newzoo's US\$906M estimate for the market size of esports in 2018 is driven by advertising, sponsorship, and media rights. We believe these segments will outpace the growth of licensing fees to publishers and tickets and merchandise, which will also grow with the ecosystem. Appendix 2 provides a recap of these end markets. Rather than size up the marketplace, this report will focus on opportunity for investment and the sectors and topics that are not as widely publicized.

As the esports landscape currently stands, private investment has been almost exclusively in esports teams.

As the esports landscape currently stands, private investment has been almost exclusively in esports teams. Public investment opportunities tend to feature blue chip companies (for example, Tencent, Activision, Nvidia) with the most exposure to the space; however, none of these are pure plays. Figure 1 below features some of the notable investments in the space in 2018 – many of which have been well publicized. At the end of this report in Appendix 3, we highlight numerous public names with esports exposure.

With respect to investors, the current landscape is dominated by three broad groups: corporate & institutional, traditional sports franchises, and entertainment & athletes. We believe the latter two groups have experience building an audience and are well positioned to realize synergies that can be generated from established connections in the entertainment industry. While data around valuation remains elusive due to the private nature of the space, reported investment into the sector appears only to be growing.

Figure 1: Investor by major cohort – esports teams the common target

Investor	Background	Investment (US\$)	Target	Subsector
Corporate & Institutional				
Aquilini Group	Diversified Investment Corp	Undisclosed	Vancouver Titans	Esports team
Asus	Computer hardware company	US\$16M	Huajing Culture Media	Diversified
Bessemer Venture Partners	US VC firm	Undisclosed	Team Solomid	Esports team
Comcast	US Telecom Service Provider	Undisclosed	N3rd Street Gamers	Distribution network
Comcast	US Telecom Service Provider	Undisclosed	Philadelphia Fusion	Esports team
Sports Teams & Owners				
FC Schalke 04	German Soccer Club	Undisclosed	Team Elements	Esports team
Mark Cuban	Owner of Dallas Mavericks	Undisclosed	Unikrn	Esports gambling
Jerry Jones	Owner of Dallas Cowboys	Undisclosed	CompLexity Gaming	Esports team
Robert Kraft	Owner of New England Patriots	Undisclosed	Boston Uprising	Esports team
Joe Lacob	Owner of Golden State Warriors	US\$13M	LCS Franchise	Esports team
Entertainment & Athletes				
Ashton Kutcher	Actor	Undisclosed	Unikrn	Esports gambling
Rick Fox	NBA Star	Undisclosed	Echo Fox	Esports team
Steph Curry	NBA Star	Undisclosed	Team Solomid	Esports team
Steve Aoki	DJ and Music Producer	Undisclosed	Rogue	Esports team
Tony Robbins	Author and speaker	Undisclosed	Team Liquid	Esports team

Source: Medium, Engadget, Crunchbase, Canaccord Genuity research

As noted, the targets of these investments are almost exclusively teams (bolded in the chart above). Broadly, there are two types of esports teams: franchise and traditional.

- **Franchise teams** are a narrower subset that includes teams that are part of a localized league under a single gaming title (franchise model discussed in more detail below). For example, the Aquilini Group purchased a Vancouver franchise team in the Overwatch League.
- **Traditional teams** represent the widely known organizations that operate independently and maintain team rosters under numerous gaming titles. These brands generally operate and are recognized globally. An example is Team Liquid, with rosters in over ten different games and the highest team earnings of all time.

The league franchise models have created a sustainable framework for investment, and this is attracting much of the interest (discussed in more detail below). This includes League of Legends (or LoL), a multiplayer strategy game, and Overwatch, a team-based first-person shooter. The benefit of paying for a franchise slot is that this guarantees a city-based spot in the league for more than one year/season.

In a similar arrangement, there exists a basketball esports league based around established franchises in the NBA. The publisher behind the NBA 2K league, public company TakeTwo Interactive, just inked a deal with the NBA and NBA PA for a seven-year agreement worth US\$1.1B for the rights to license team and player assets.

Traditional teams that existed before the league franchise model are attracting serious investment: Forbes and ESPN reported that the team Cloud9 raised US\$25M in October 2018 and another US\$50M in January 2019 from a collection of celebrity and VC investors. Limited details exist around the two deals, but it does appear that valuations have been increasing rapidly. Even recent investments would have seen strong returns. This appears to be driven by a scarcity of opportunities and FOMO, rather than by fundamentals.

It is also worth noting that there can be overlap: Cloud9 and Team Solomid are traditional teams that have rosters for many game titles but also hold franchise slots in the League of Legends North American league. A nuance in the Overwatch League model is that traditional teams that subscribe to a franchise are forced to create a new brand, which is generally regarded as a protectionist move by Activision to generate its own brand equity.

All in all, we believe 2019 will continue to see investment in esports teams and other niche content creators and media opportunities as the space expands. As the franchise model unfolds and distribution rights become more valuable, we believe media distribution companies and video game publishers are poised to capture much of the upside as the industry pushes through the early stages. Again, we discuss these dynamics and include many of these names in our primer in Appendix 2. As well, a complete public company valuation table can be found in Appendix 3.

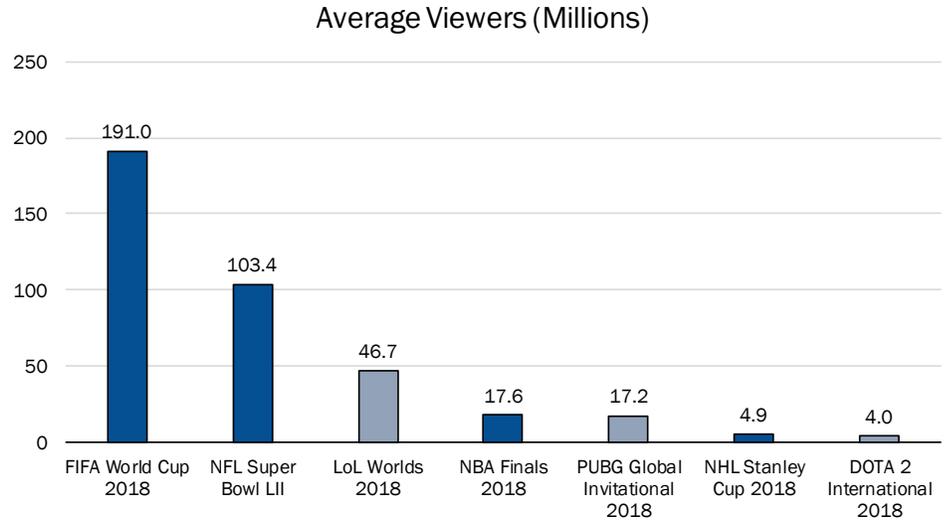
Comparison to traditional sports

Given that most of the private esports investment has been in esports teams, it is useful to compare these teams and franchises to their traditional counterparts. The figure below is a familiar chart refreshed for 2018 metrics. The average viewers data is the average concurrent viewership throughout the tournament as opposed to peak viewers, as we feel this better represents the opportunity to advertisers who will endorse the space. Esports tournaments hold up impressively against their traditional counterparts.

As a side note, the LoL Worlds 2018 finals attracted peak viewership of 205.4M globally, according to Esports Charts. That said, excluding Chinese viewers this figure

was 2.0M. While there is much excitement around esports and LoL in North America, at this early stage the audience appears to be driven by Asian markets.

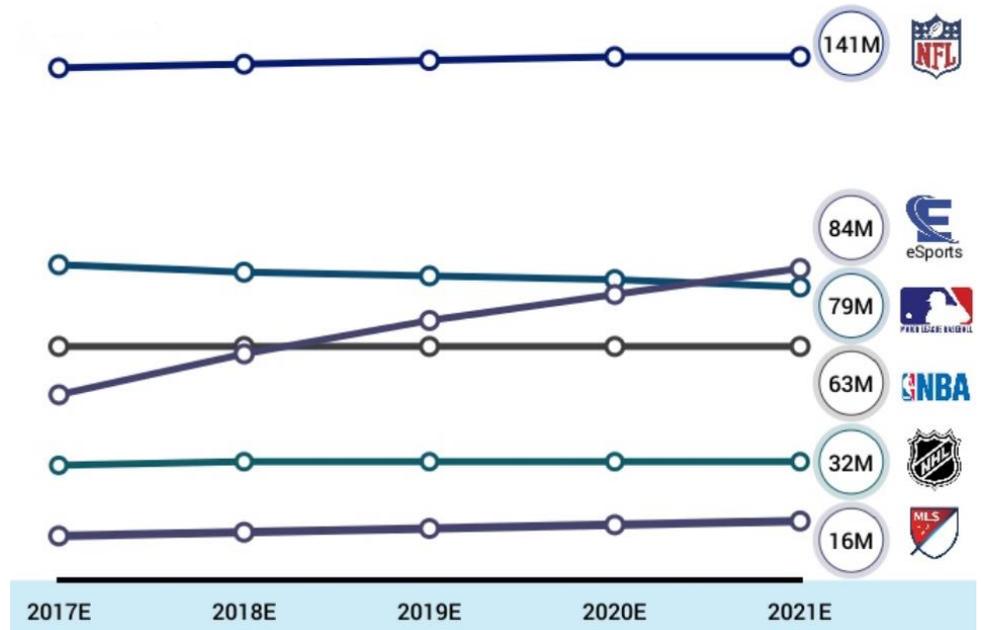
Figure 2: Esports events rank among top traditional sports in 2018



Source: FIFA, ESC.Watch, NBC Sports, Sports Media Watch, USA Today, Canaccord Genuity research

In the chart below, similar viewership data is compiled in a time series format by consulting firm Activate. The average viewership data indicates that esports will exceed all other North American sports leagues in viewership by the year 2021. Also noteworthy is that the viewership of most other leagues is relatively flat over time, while esports viewership growth continues to grow linearly.

Figure 3: Esports viewership estimated to surpass traditional North American sports leagues



Source: Activate Tech and Media Outlook 2017

The demographics behind esports represent a more progressive, digitally focused end market than the traditional sports audience.

As a point we highlighted in our May 2018 publication, the esports audience is especially valuable to advertisers for more than just gross viewership statistics. The demographics behind esports represent a more progressive, digitally focused end-market than the traditional sports audience. According to research firm Activate, 62% of US esports viewers are aged 18 to 34. Figure 4 below demonstrates that the median age of every other sport is well above this range.

Figure 4: Esports estimates suggest 62% of viewers between 18-34 years old

Property	Median age (2016)	Change since 2006
PGA Tour	64	+5
ATP Tour	61	+5
Major League Baseball	57	+4
Women's Tennis Association	55	-8
Olympic Games	53	+3
National Football League	50	+4
National Hockey League	49	+7
English Premier League	43	N/A
NBA	42	+2
International football	39	+4
Average traditional sports	51	
Esports	25	

Source: PwC's Sports Survey 2017, Nielson Esports Fan Insights, Canaccord Genuity research

Refresher on the traditional revenue streams

Figure 5 below highlights the core esports revenue streams as laid out by research firm Newzoo. Ahead of an annual update that will be published in mid February, we have included the 2017 and 2018E Newzoo industry figures along with helpful context and brands that are involved in the ecosystem.

Figure 5: Five core revenue streams comprising US\$906M F2018E esports ecosystem

	Game Publisher Fees	Advertising	Sponsorship	Merchandise	Media Rights
Brief description	• Fees remitted to publishers and leagues for licensing rights	• Traditional sports and broadcast marketing	• Brand name investment in teams, players, and the ecosystem	• Admission fees and merchandise sold at events	• Distribution rights paid for by broadcasters and streaming platforms
2017 Revenue (US\$ M)	105	140	235	82	93
2018E Revenue (US\$ M)	116	174	359	96	161
<i>Estimated Growth YoY</i>	11%	24%	53%	16%	72%
Brands Involved					
End Markets	<ul style="list-style-type: none"> • Tournaments • Leagues 	<ul style="list-style-type: none"> • Tournaments • Broadcasters 	<ul style="list-style-type: none"> • Tournaments • Leagues • Teams • Players 	<ul style="list-style-type: none"> • Tournaments • Online sales 	<ul style="list-style-type: none"> • Viewers

Source: Newzoo, Canaccord Genuity research

These metrics include the key beneficiaries of the blossoming sector, but we add the caveat that much of the revenue ultimately flows to the video game publisher (namely publisher fees and media rights, with opportunities to share in the economics of the remaining segments as well). As a reminder, the publisher is the creator of the video game property, or Activision in the case of Overwatch. Most publishers are public companies listed in Appendix 3, although these are global organizations with billions of dollars of sales – esports revenues will not meaningfully impact their financial performance and thus we would not call them pure plays. As such, in the balance of the report we turn our focus toward less publicized but more relevant esports investment opportunities, including team economics and esports gambling.

Esports leagues and teams

Leagues and franchising

The concept of franchising involves localizing teams in select cities around a certain gaming title. Historically, esports leagues used a promotion/relegation model, similar to most professional soccer leagues in Europe. Every year teams will be promoted to or relegated from the championship series or playoffs based on their performance. As such, in any given year there may exist representation from any number of cities/countries globally.

For several reasons, we believe the franchise model brings sustainability to the esports ecosystem.

We would liken the franchise model to most North American sports leagues, such as the NFL or NBA. Franchises are secured in select cities and these teams do not move year over year. For several reasons, we believe this brings sustainability to the esports ecosystem. The franchise model brings a professional structure to the ecosystem. Franchising helps to attract sponsors and investors with the expectation of longevity. This allows for multi-year contracts with sponsors, broader support staff and team

infrastructure, and targeted marketing in select cities. As well, players are granted more stable career prospects, with annual salaries and benefits.

The LoL Championship Series (League Championship Series or LCS) moved from a global promotion/relegation model to a fixed North American franchise model in 2018. This featured a lineup of ten permanent teams which bid on spots in the league. The teams are required to meet owner Riot Games' criteria for player support and brand management. Teams cost between US\$10M and US\$13M. Among the ten finalized team rosters are familiar esports teams including Cloud9, Team SoloMid and Team Liquid.

The Overwatch League (OWL) has become extremely popular and the franchises have attracted significant investment since the league's debut in 2018. The original 12 teams are estimated to have costed US\$20M each. Due to demand, the eight expansion teams that will be added to the 2019 season are estimated to range from US\$30M to US\$60M per team. We believe the average purchase price is US\$37.5M, nearly double the original price. Additional details are included below – the newly added Canadian teams are highlighted.

Figure 6: Team by location and owner, Canadian teams highlighted light yellow and featured in Appendix 1

Division	Team	City	Debut Season	Owner
Atlantic Division	Atlanta Reign	Atlanta	2019	Atlanta Esports Ventures, joint venture of Cox Enterprises and Province Inc.
Atlantic Division	Boston Uprising	Boston	2018	Kraft Group
Atlantic Division	Florida Mayhem	Miami-Orlando	2018	Misfits
Atlantic Division	Houston Outlaws	Houston	2018	OpTic Gaming, subsidiary of Infinite Esports & Entertainment
Atlantic Division	London Spitfire	London	2018	Cloud9
Atlantic Division	New York Excelsior	New York City	2018	Sterling.VC, venture capital sister company of the New York Mets
Atlantic Division	Paris Eternal	Paris	2019	DM Esports, subsidiary of McCourt Global
Atlantic Division	Philadelphia Fusion	Philadelphia	2018	Comcast Spectacor
Atlantic Division	Toronto Defiant	Toronto	2019	OverActive Media and Splyce
Atlantic Division	Washington Justice	Washington D.C.	2019	Washington Esports Ventures, established by Mark Ein (owner of the Washington Kastles)
Pacific Division	Chengdu Hunters	Chengdu	2019	HUYA Inc, Chinese streaming service
Pacific Division	Dallas Fuel	Dallas	2018	Team Envy
Pacific Division	Guangzhou Charge	Guangzhou	2019	Nenking Group
Pacific Division	Hangzhou Spark	Hangzhou	2019	Bilibili
Pacific Division	Los Angeles Gladiators	Los Angeles	2018	Kroenke Sports & Entertainment
Pacific Division	Los Angeles Valiant	Los Angeles	2018	Immortals
Pacific Division	San Francisco Shock	San Francisco	2018	NRG Esports
Pacific Division	Seoul Dynasty	Seoul	2018	Gen.G Esports
Pacific Division	Shanghai Dragons	Shanghai	2018	NetEase
Pacific Division	Vancouver Titans	Vancouver	2019	Aquilini Investment Group

Source: ESPN, Canaccord Genuity Research

Unfortunately for publishers looking to franchise their titles, there exists a chicken and egg problem around deciding which games will become multi-generational titles. According to animator and video game designer Don Bluth, "Shelf-life for a regular video game is usually about three to five years, and that's it." Other estimates suggest eight years for a popular title.

Among popular esports titles, DOTA 1 (Defense of the Ancients) was released in the early 2000s and LoL was released in 2009. At the other end, however, Fortnite's Battle Royale is less than two years old and is arguably the most popular game in the world by many metrics. Even now there are signs that Apex Legends is quick on Fortnite's heels. Video game popularity is dictated by fickle players and longevity can be very difficult to predict, given new games and superior graphic quality are constantly disrupting the landscape. In many ways, video games are much like major movie blockbusters where fan engagement is challenging to forecast ahead of time.

Publishers, league organizers, and teams cannot ignore the risk of a game falling out of favour following an expensive franchise buildout.

With that all in mind, a social media presence and localized fan base can help to preserve franchises like Overwatch, but we cannot ignore the risk of a game falling out of favour following an expensive franchise buildout. We believe teams with a strong brand presence and rosters that span multiple titles will be best insulated from this risk.

Esports teams: Deep dive

Esports teams have created a viable mechanism for players and managers to pool resources to spread risk and share in the rewards. For example, a talented video game player competing independently risks losing most competitive events through the year, which would be challenging financially and for the player's reputation. We also note the development of multiplayer games designed for team competition. By joining an esports team, the player will be offered a fixed salary, benefits, and a predictable contract term that offers some stability.

Esports teams have traditionally attracted talent and participated in multiple leagues, with A and B teams for many titles. More recently, franchising has altered this dynamic. As explained earlier, this is a step forward in terms of professionalizing the industry and creating a sustainable investment framework.

Since the financial details surrounding the teams are entirely private, there is much speculation but limited hard evidence supporting the economic models and profitability. Given that is the case, it is best to start with the public details around the franchise model and work backward to our estimates for traditional teams.

Economics for franchise teams are different from traditional teams, given the publisher is facilitating the competition and is taking a cut of the profits. This is the single greatest difference between traditional sport and esports franchise models – no single entity owns football or basketball, whereas LoL and DOTA 2 represent wholly-owned IP. Ownership of the IP bolsters the power of the publisher in the ecosystem.

In traditional sports leagues, the governing bodies are entitled to limited economics and most of the value accrues to the team owners. This is not the case in esports franchise models, where the publishers share in the distribution, sponsorship, and merchandise economics on their own terms. As well, publishers reserve the right to change the rules of the game by pushing updates, effectively changing the sport and thereby forcing teams and players to adapt. Publishers have disproportionate control over the entire ecosystem, but this is balanced by a longer-term mission to increase the longevity of their leagues by creating proper incentives for teams and other stakeholders.

Based on our research and best estimates, details for two of the most popular franchises are below.

Figure 7: Metrics around two most popular North American esports leagues

	OWL	NA LCS
Publisher	Activision	Riot Games
Debut season team count	12	10
Debut season franchise fee (US\$ M)	20	10-13
Current team count	20	10
Current franchise fee (US\$ M)	30-60	N/A
Geography	Global	North America
Economics		
Teams	33.3%	32.5%
Players	33.3%	35.0%
Publisher	33.3%	32.5%
Note	[CG Est]	[Disclosed]

Source: DigitstoDollars, Liquipedia, Canaccord Genuity Estimates

A recurring theme throughout the report is that much of the value accrues to the publisher.

The table above provides some insight into the economics around the franchise model. A recurring theme throughout the report is that much of the value accrues to the publisher. As credit for developing the IP, leagues are entitled to 30%+ of revenues in addition to the franchise fee. As well, ESPN reported a fee for selling an OWL team in the secondary market (link [here](#)). According to this source, 25% of proceeds are payable to Activision Blizzard when a team is sold. LoL has not introduced any similar policy.

That said, as the opportunity unfolds and the market expands, franchise owners and players will have an opportunity to grow their business models alongside publishers. Both leagues above have introduced minimum player salaries and support the players as central stakeholders in the business model. Minimum salaries start at US\$50k but sources indicate full wages plus bonus average US\$80k to US\$120k. In many cases, this is prior to ancillary earnings that are arranged privately with corporate sponsors or other media projects.

Without a prescribed remittance to a governing publisher, we believe traditional teams have more flexibility in determining the economic structure. Revenues are generated primarily from sponsorship contracts. We believe there is increased flexibility to create mutually beneficial contracts with players, including exclusivity around sponsorship deals. As an example, we estimate that a typical traditional team revenue breakdown would be different in that the team would generate sponsorship and media revenue, whereas the leagues are responsible for this in the franchise model. Our revenue share estimates around a non-franchise esports team are as follows:

- 50% - Sponsorship revenue (recurring)
- 25% - Distribution platforms, media, and social (recurring)
- 25% - Prize money, player transfers, merch, and other (variable)

Team winnings are not immaterial, as seen in the table below. That said, they are not a primary or reliable source of revenue. Most of the earnings in the table below for top teams are from winning annual DOTA 2 tournaments, which account for a significant amount of the total esports prize pool. Figure 9 includes prize pool by title, which is currently concentrated around a few games and tournaments.

As a barometer for media rights revenue potential, streaming platform Twitch announced in January 2018 a two-year deal worth at least US\$90M for the rights to stream Overwatch League competition for two years (average of US\$45M per year). A

deal of this size for a single league begins to validate the sector's revenue potential; however, the economics are going to be spread quite thinly across the publisher and teams. We believe sponsorship will represent the largest revenue source for the Overwatch League, with support from ticket and merchandise sales.

To put this into perspective, Fox paid more than US\$3B to broadcast Thursday Night Football for five seasons (average of US\$600M per year). In 2013, Rogers paid C\$5.2B to the NHL as part of a 12-year agreement (C\$436M per year). The monetization gap is evident even though esports viewership statistics are catching up to traditional sports. We believe this monetization gap will erode over time as esports become more and more mainstream, in part supported by leagues like the Overwatch League that create awareness for the sector.

Figure 8: All-time earnings, highlighted teams featured in Appendix 1

Rank	Team Name	US\$ Earnings	Tournaments
1	Team Liquid	\$25,255,148	1,460
2	Evil Geniuses	\$20,953,019	740
3	Team OG	\$17,614,446	52
4	Newbee	\$12,899,510	131
5	Fnatic	\$12,810,141	805
6	Virtus.pro	\$12,301,938	442
7	LGD Gaming	\$10,716,911	125
8	Invictus Gaming	\$10,226,551	388
9	Vici Gaming	\$10,017,642	252
10	Wings Gaming	\$9,734,326	23
11	SK Telecom T1	\$8,571,259	216
12	Natus Vincere	\$8,494,524	398
13	Cloud9	\$8,368,659	611
14	Team Secret	\$7,803,450	131
15	OpTic Gaming	\$7,400,343	275
16	FaZe Clan	\$6,108,140	226
17	MVP	\$6,045,072	470
18	Team EnVyUs	\$5,963,951	294
19	SK Gaming	\$5,951,976	608
20	Astralis (Danish)	\$5,918,019	60
21	Paris Saint-Germain Esports	\$5,449,206	38
22	Samsung	\$5,261,476	348
23	Digital Chaos	\$4,403,788	27
24	Alliance	\$4,353,116	273
25	G2 Esports	\$4,100,181	320
26	mousesports	\$3,918,258	825
27	CDEC Gaming	\$3,574,473	38
28	Team Dignitas	\$3,548,779	536
29	EHOME	\$3,457,248	70
30	Luminosity Gaming	\$3,185,319	219

Source: DigitstoDollars, Liquipedia, Canaccord Genuity estimates

Framing our thoughts around valuation

Investment decisions are driven by valuation; however, limited public information exists related to the financial performance of teams. All teams are owned privately, and the public companies listed in Appendix 3 with limited esports exposure do not serve reliably as a benchmark. We are monitoring the market for valuation information. It appears two key drivers thus far for investment in traditional teams are historic team success and global brand recognition.

Forbes shared an article (link [here](#)) listing esports team valuations and revenue figures. The article suggests 2018 revenues in the range of US\$10-25M for some of the world's top teams, and valuations in the range of US\$100-300M. While neither metric has been shared with the public, our discussions with industry players indicate the revenue levels may be exaggerated.

At these levels, valuations for esports teams range from 9-20x 2018 revenue with an average of ~14x. To further discount the stated revenue metrics would drive valuations to greater than 20x sales. At these levels, it becomes difficult to ascribe fundamental analysis, as they are lofty multiples driven by expectations of strong multi-year growth.

As a point of comparison, the same Forbes' article indicates that valuations for traditional sports franchises average ~5x revenue, ranging from 3-7x. For the sake of discussion, we will assume these metrics are reasonable. We believe esports teams deserve a higher valuation for two main reasons:

1. Expectations for audience and thus revenue growth are much larger than for the mature traditional sports franchises.
2. The digital nature of esports lends itself to technological innovation that may enable new revenue streams and better engage a younger demographic and global audience.

That said, we leave the analysis around valuation open for debate but will keenly follow and frame financial metrics as they are disclosed by leagues and teams.

Featured companies in Appendix 1:

- **Aquilini Group** (owns Vancouver OWL team)
- **aXiomatic Gaming** (owns Team Liquid)
- **OverActive Media** (owns Toronto OWL team)
- **Reciprocity**

Media, promotion, and entertainment

Prize pool growth serves as leading indicator for sector

Media, promotion, and entertainment are the biggest revenue components in the esports sector. Sponsorship is the largest segment currently, but we expect this to yield eventually to media and broadcast rights.

We believe that the steady growth in prize pools is an important leading indicator for the esports sector because the deep-pocketed publishers are highly motivated to increase esports engagement. Holding all other factors constant, we believe larger prize pools are an indirect sign of bigger and more engaged events and, more broadly, audience growth. So far, commitments for 2019 have been very positive. Fortnite has committed US\$100M in total prize pool for 2019; the game is living up to the hype. The OWL has committed US\$5M to the 2019 season, a bump from the US\$3.5M offered in 2018. The table below indicates prize pools for 2018, as a proxy for the comparative size of different titles.

Living up to the hype: Fortnite has committed US\$100M in total prize pool for 2019.

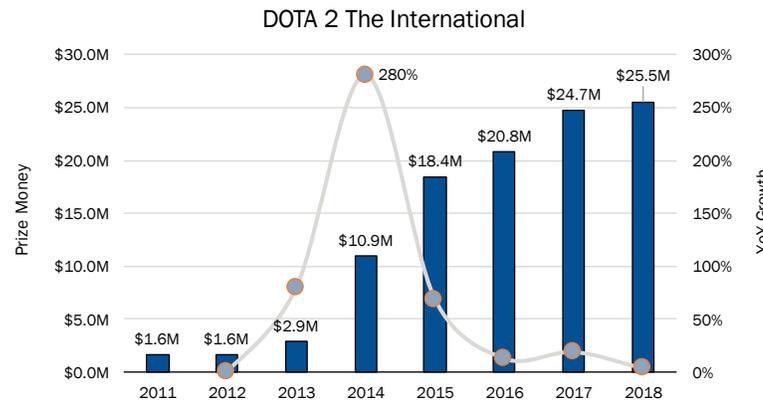
Figure 9: DOTA 2 dominates historically but increasing breadth

2018 data			Largest Single Event in 2018 by prize money			
Title	Publisher	Total prize pool	Tournament	Prize money	Teams	Peak viewership
DOTA 2	Valve	US\$41.3M	The International 2018	US\$25.5M	18	14.96M
Counter-Strike: Global Offensive	Valve	US\$22.5M	Multiple	US\$1.0M	22	1.90M
Fortnite	Epic Games	US\$20.0M	Fall Skirmish Series	US\$6.0M	N/A	0.56M
League of Legends	Riot Games	US\$14.1M	LoL 2018 World Championship	US\$6.5M	24	205.35M
PlayerUnknown's Battlegrounds	Bluehole	US\$6.7M	Global Invitational 2018	US\$3.0M	44	60.15M
Overwatch	Blizzard	US\$6.7M	OWL - Season 1 Playoffs	US\$1.7M	6	1.23M
Heroes of the Storm	Blizzard	US\$6.5M	HGC 2018 Grand Finals	US\$1.0M	12	0.26M
Hearthstone	Blizzard	US\$5.0M	Global Games 2018	US\$0.4M	48	0.43M
StarCraft II	Blizzard	US\$4.5M	WCS Global Finals	US\$0.7M	N/A	0.25M
Call of Duty: WWII	Activision	US\$4.2M	CWL Championship 2018	US\$1.5M	32	0.32M

Source: EsportsEarnings, EsportsObserver, Esports Charts, Canaccord Genuity research

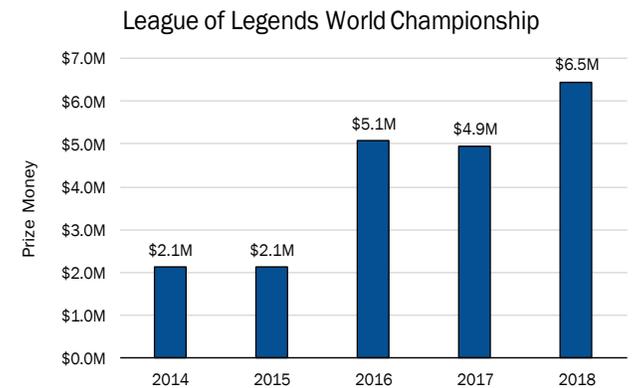
The following charts demonstrate the year-over-year prize money growth for two of the most established esports titles, DOTA 2 and LoL Worlds. Valve, the publisher behind DOTA 2, uses a crowdfunding method to aggregate the annual prize pool. Valve contributes a fixed US\$1.6M every year, and then adds 25% of in-game "Battle Pass" sales to the annual total. This process was introduced in 2013 (seen below, US\$1.6M previously) and has been a successful and engaging idea.

Figure 10: Pool beginning to plateau after rapid growth



Source: EsportsEarnings, Canaccord Genuity research

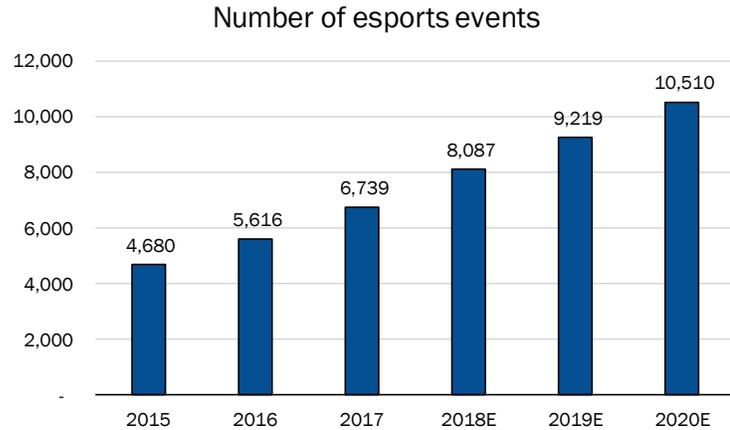
Figure 11: Staggered growth but upward trend



Source: EsportsEarnings, Canaccord Genuity research

Our previous research covered viewership and audience metrics thoroughly, which includes sold-out stadiums for esports competition on every continent in the world. We expect growth to continue online as well as in physical locations, especially as franchise models unravel and games grow in popularity. As a proxy for growth, Figure 12 below illustrates at a high level the expected growth in the number of esports events annually, according to Eilers & Krejci Gaming and Narus.

Figure 12: Steady growth in esports events annually



Source: Eilers & Krejci Gaming, Narus, Canaccord Genuity research

Featured companies in Appendix 1:

- **Ateyo** (esports merchandise)
- **Beyond the Summit** (media production)
- **Cineplex** (Canadian entertainment giant with esports angle)
- **Enthusiast Gaming** (owns websites and hosts events)

Esports betting market

An overview

While not traditionally thought of as part of the esports ecosystem, the betting market is expected to grow in stride and is attracting investment all the same. DraftKings co-founder and CRO Matthew Kalish says his company’s esports business grew 60% between 2016 and 2017. This was with just one game on offer, League of Legends.

We believe there is a strong intuitive argument to be made for the growth potential in esports gambling. While traditional sports are based in physical arenas and it is common to watch events on television via a cable subscription (although less and less so every year), esports are almost exclusively viewed online. Rather than relying on second-screen viewing, an esports viewer is more likely streaming an esports event and can simultaneously follow betting lines on a separate browser tab or on the same webpage.

Another inherent advantage to esports betting is that the market size and growth are independent of popularity changes in esports. For example, we previously addressed the risk of game titles falling out of favour as a risk to publishers and the franchise team model. However, esports betting websites will offer products suitable for all games, eliminating much of the risk. Esports gambling websites are agnostic with regard to the publisher, IP issues, API’s and game popularity/cyclicality. For as long as the broad sector and esports audiences grow, it is reasonable to expect complementary growth in the gambling market.

While the data and estimates were published in 2016, Figure 13 below is a widely referenced resource for the size of the esports gambling market. As a reminder, the handle is defined as the total amount of money wagered by bettors at a sportsbook over a given period. Our previous research on the gaming space estimated that traditional sportsbook operators earn net revenues of 5% of the total handle. This is

Handle is defined as the total amount of money wagered by bettors at a sportsbook over a given period.
- The Lines

generated on the sportsbook operators' spread on betting lines. For example, a US\$6.7B handle would yield US\$335M in net revenues for the market. We believe inefficiencies and limited competition in the esports gambling space could result in a higher yield, but this would carry higher volatility in profits. We also note that the recent US Supreme Court decision to strike down prohibition on sports betting is a boon for the nascent sector.

Figure 13: Expectation for solid growth



Source: Eilers & Krejcik Gaming, Narus, Canaccord Genuity research

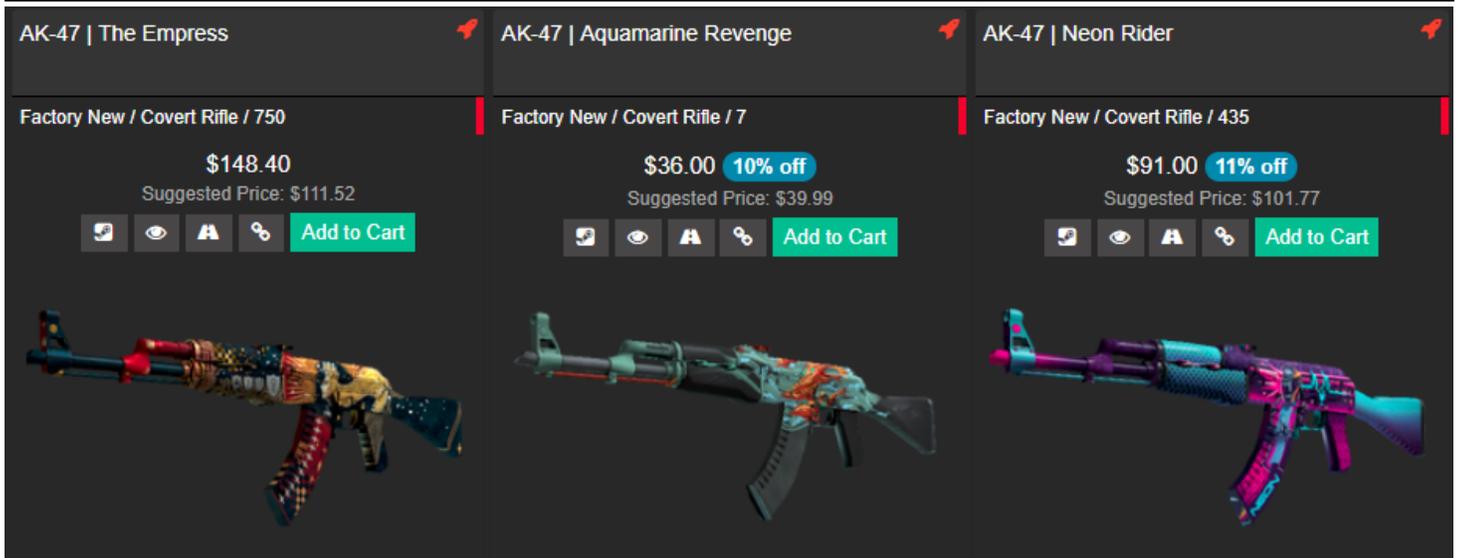
According to Eilers & Krejcik and Narus, the projected figures above more than halved following the Valve crackdown. For context, Counter-Strike: Global Offensive (CS:GO) and DOTA 2 developer Valve faced regulatory challenges related to the esports betting market surrounding its titles in 2016.

Many gambling websites offered skin betting (discussed below), which created a market for betting which had become accessible to minors, as well as being operated without proper oversight. According to The Lines, Valve was pressured to issue cease-and-desist letters to many of these popular sites, which were using Valve's IP for commercial use. In short, this dried up the supply side of the esports gambling market, which was otherwise thriving. The current norm is betting with fiat currency (or cash betting), which is still poised for strong growth despite a crackdown on skins betting.

Esports gambling 101

Instead of cash betting, users traditionally gambled with in-game items from CS:GO, DOTA 2, and other games. This is called skin betting. These skins have no impact on gameplay and are strictly cosmetic. For example, these change the appearance of a character, accessory, or weapon. Figure 14 below includes skins for the popular AK-47 rifle. As one can imagine, the default weapon is a neutral colour. These skins are typically purchased by players for fiat currency or hard-earned in-game currency and can be extremely valuable.

Figure 14: Examples of CS:GO skins for the AK-47 rifle – some sell for >US\$100



Source: BitSkins

Figure 15: Betting websites

Name	Founded	Offering
Bet365	2000	Traditional
Betspawn	2016	Esports focused
Rivalry	2017	Esports focused
Betway	2006	Traditional
Pinnacle	1998	Traditional
Unikrn	2014	Esports focused
EsportsPools	2014	Esports focused
skillz	2012	Esports focused
888sport	2008	Traditional
bodog	1994	Traditional
EGB.com	2011	Esports focused

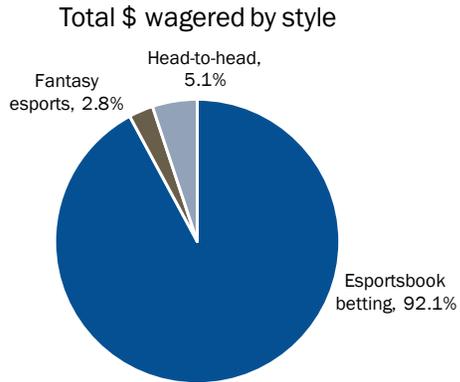
Source: Company websites

Mechanically, skin betting was widely accessible and enabled the esports betting ecosystem to flourish. The prohibition on skin betting has created a window for esports cash betting websites which is becoming an ever more competitive space.

There are also several types of esports betting that have some similarities and differences from traditional sports betting. Three of the main styles include:

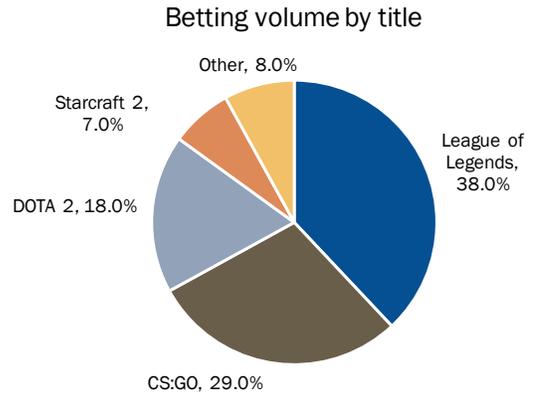
1. **Esportsbook betting.** Traditional format; players wager on outcome of esports events. The familiar format makes it the largest market by size (Figure 16). Potential challenges include a lack of data for bookmakers, which can limit opportunities for creative pricing such as parlays (combination bets that can often increase margins for sportsbook operators). Publishers own this data but they are incentivized to make this data public so that esports competitors and gamblers alike can delve into the statistics; similar to traditional sports.
 - > *Operator economics: Taking a spread on betting lines.*
2. **Fantasy esports.** This is akin to a fantasy format for traditional sports. Users create a roster of esports pros. A salary cap model is most prevalent. While a small market currently, this may thrive as engagement and familiarity grow.
 - > *Operator economics: A rake (or fees) on cash-prize contests.*
3. **Head-to-head.** This interactive angle allows players to compete against one another for the spoils. This is also a small market currently with loose regulatory oversight. However, there is an opportunity to create a sizeable market where passionate players can compete for cash (microtransactions even) making everyday gameplay much more exciting.
 - > *Operator economics: A rake (or fees) on cash-prize contests.*

Figure 16: Head-to-head an interesting angle in esports



Source: Eilers & Krejcik Gaming, Narus, Canaccord Genuity research

Figure 17: LoL the most popular title by betting volume



Source: Eilers & Krejcik Gaming, Narus, Canaccord Genuity research

Featured companies in Appendix 1:

- **Askott Entertainment** (operates fantasy esports betting website ESP)
- **PMML Corp.** (operates esports betting website Rivalry)

Appendix 1: Featured esports companies

Figure 18: Company profiles

Company name	Ownership	Headquarters
Esports leagues and teams		
Aquilini Group/ Luminosity	Private	Vancouver, BC
aXiomatic (Team Liquid)	Private	Los Angeles, CA
OverActive Media	Private	Toronto, ON
Reciprocity	Private	Toronto, ON
Media, promotion, and entertainment		
Ateyo	Private	Los Angeles, CA
Beyond the Summit	Private	Covina, CA
Cineplex	CGX-TSX BUY, Aravinda Galappathige	Toronto, ON
Enthusiast Gaming	EGLX-TSXV Not rated	Toronto, ON
theScore	SCRX-TSXV Not rated	Toronto, ON
Esports gambling		
Askott Entertainment	Private	Vancouver, BC
PMML Corp.	Private	Toronto, ON

Source: Canaccord Genuity research

Aquilini Group

Esports leagues and teams

Figure 19: Aquilini Group overview



Founded: 1960s

Headquarters: Vancouver, BC

Employees: 51-100

Key Executives:

Francesco Aquilini – Managing Director

Adrian Montgomery – President, Aquilini Entertainment

Steve Maida – Founder, Luminosity Gaming

Source: LinkedIn, Company website

Overview

At the highest corporate level, Aquilini Investment Group is a diversified investment corporation with interests in real estate, sports & entertainment, and other verticals. The sports & entertainment subset is best known for the organization's ownership of the NHL's Vancouver Canucks and their home ice, the Rogers Arena. The organization entered the esports arena in 2018 when it acquired an Overwatch League franchise based in Vancouver – one of eight 2019 expansion teams and one of two Canadian teams. When the 2019 season begins in February, the newly named Vancouver Titans are expected to play at the Blizzard Arena in Los Angeles.

Involvement with Luminosity Gaming

Luminosity Gaming, based in Toronto, is a professional esports organization with teams in more than five different game titles. According to Esports Earnings, Luminosity ranks 30th globally for all-time prize money earned. The two brands came together when Aquilini announced it had partnered with Luminosity to assist in managing the new Overwatch League team, the Vancouver Titans.

Figure 20: Logo and branding for new OWL team Vancouver Titans



Source: Esports.com

Recent news events and highlights

- **December 2018** – The Aquilini Group presents the logo and name for the new OWL team, the Vancouver Titans.
- **September 2018** – The company announces it has purchased a franchise in the Overwatch League for the 2019 expansion season.

aXiomatic

Esports leagues and teams

Figure 21: aXiomatic overview



Founded: 2015
Headquarters: Los Angeles, CA
Employees: 2-10

Key Executives:

Bruce Stein – CEO & Co-founder
Peter Guber – Co-executive Chair
Ted Leonsis – Co-executive Chair
Bruce Karsh – Co-executive Chair
Jeff Vinik – Co-executive Chair

Source: LinkedIn, Company website

Overview

aXiomatic is a diversified investment company that partners with esports and gaming businesses. The company began operations in November 2015 with a mission to build a portfolio of dynamic company holdings in the esports and video gaming industry. aXiomatic's leadership includes Co-Executive Chairmen Peter Guber, Ted Leonsis, Jeff Vinik and Bruce Karsh, who together represent a very strong team of sports, technology, entertainment and investment industry leaders. Through strategic partnerships, investments and acquisitions, the team connects esports groups with valuable resources including venues, technologies, media content, distribution partners and investment capital.

In September 2016, aXiomatic acquired a controlling interest in one of the world's premier esports brands, Team Liquid, run by Co-CEOs Steven Arhancet and Victor Goossens. This acquisition gives aXiomatic an authentic perspective into the rapidly evolving esports industry and strengthens the team's ambitions of creating new and rich experiences for audiences and athletes alike.

Team Liquid was founded in 2000 as a clan on the gaming platform Battle.net and has evolved into one of the leading international multigame esports teams, with training centers in Utrecht, The Netherlands, Sao Paulo, Brazil and Los Angeles, California. Team Liquid has over 65 athletes competing across 16 distinct games, including all major esports titles, such as DOTA 2, League of Legends, CS:GO, Fortnite, PUBG and more. Led by Co-CEOs Steve Arhancet and Victor Goossens, Team Liquid is one of the most successful esports teams in the Western market in terms of competitive achievement and fan engagement across multiple gaming titles. Recent achievements include a first-place finish at the DOTA 2 International 2017 and two consecutive first place finishes at League of Legends' NA LCS Championships.

Figure 22: Team Liquid logo



Source: The Esports Observer

Recent news events and highlights

- **January 2019** – Honda is announced as the official automotive partner of Team Liquid.
- **September 2016** – Peter Gruber and Ted Leonsis lead buying group for esports organization Team Liquid.

OverActive Media

Esports leagues and teams

Figure 23: OverActive Media overview



Founded: 2017

Headquarters: Toronto, ON

Employees: 2-10 (LinkedIn)

Key Executives:

Chris Overholt – President & CEO

Sheldon Pollack – Chairman

Adam Adamou – Co-Founder & Director

Source: LinkedIn, Company website

Overview

OverActive Media Group's mission is to build an integrated esports company via esports team ownership, strategic partnerships and select investments. In 2018, Overactive acquired a controlling interest in an Overwatch League franchise for the City of Toronto and surrounding area. This is part of the 2019 expansion season that will start up in February, with competition expected to be hosted out of a Toronto-based venue starting in 2020. In addition to the OWL franchise, OverActive owns a UK-based LoL European Championship Series franchise.

OverActive has broadened its esports team ownership through the acquisition of Splyce in 2018. Splyce has a storied history with success in multiple competitions including Call of Duty, League of Legends and Starcraft II.

In addition to Splyce, OverActive has made investments into esports-related platforms including Enthusiast Gaming (content publisher) and Askott Entertainment (fantasy-sport operator). Both of these companies are also featured in this report.

Figure 24: Logo and branding for new OWL team Toronto Defiant



Source: The Star

Recent news events and highlights

- **November 2018** – OverActive Media Group acquires Splyce to form leading esports brand.
- **September 2018** – Toronto Awarded Overwatch League Team.

Reciprocity

Esports leagues and teams

Figure 25: Reciprocity overview



Founded: 2017

Headquarters: Toronto, ON

Employees: 2-10 (LinkedIn)

Key Executives:

Chad Larsson – CEO & Director

David Fawcett – President & Director

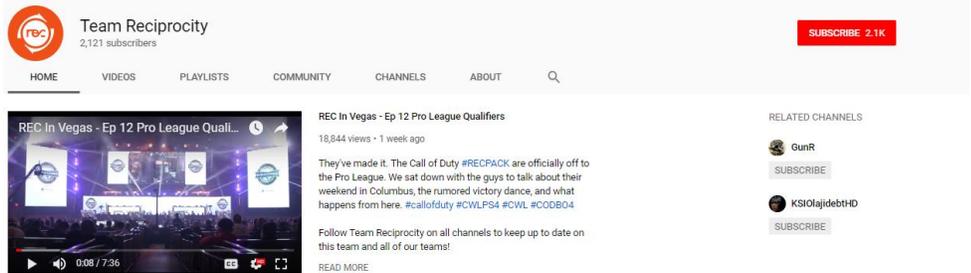
Source: CrunchBase, Company website

Overview

Reciprocity's mission is to grow its brand value as a team owner and media asset in the esports space, with the goal to position itself to own multiple franchise spots within the next three years. The company raised capital twice in 2018 to accelerate its growth plan and pursuit of franchise opportunities.

The company has secured eight esports teams – Halo, PUBG, Rainbow Six, Call of Duty, StarCraft II, Street Fighter V, Fortnite and Gears of War – which helps to broaden the marketing initiatives and connect with the target audience. As part of its brand development and vision to build an overarching marketing vehicle, Reciprocity produces premium episodic content centered around its players and to date has published 14 episodes. The company's founder, Chad Larsson, has deep relationships with both talent and game publishers stemming from more than ten years in the industry. This has enabled the company to acquire and form top-ranked global teams.

Figure 26: Team Reciprocity Youtube page



Source: YouTube

Recent news events and highlights

- **February 2019** – Signed two Fortnite players who will be competing in the Secret Skirmish 500k Tournament Feb 14-15.
- **January 2019** – Acquired Rainbow Six and StarCraft Roster.
- **January 2019** – COD team qualified for the Call of Duty World League, one of 16 spots in the world for 2019.
- **January 2019** – Celebrity stream with NFL star Baker Mayfield.
- **September 2018** – Acquired Gears of War, Call of Duty, and PUBG teams.
- **September 2018** – Established COD team house in Las Vegas.

Ateyo

Media, promotion, and entertainment

Figure 27: Ateyo overview

ATEYO

Founded: 2017
Headquarters: Los Angeles, CA
Employees: 2-10

Key Executives:
Rachel Feinberg – Co-founder/ CEO
Breanne Harrison-Pollock – Co-founder/
CCO (Chief Creative Officer)

Source: Ateyo

Overview

Ateyo creates high quality, comfortable, technical apparel designed specifically for esports and gaming. The company was founded by designers-turned-gamers Rachel Feinberg and Breanne Harrison-Pollock, who have built the business at the intersection of esports and gaming apparel. Ateyo has authentically built trust and fans through high quality product, shareable content, and exceptional customer experience.

Ateyo strives for quality in all aspects: product, content, and community. All products are designed and manufactured from the thread up in Downtown Los Angeles. Each product is carefully created with innovative technical details that make gaming as comfortable as possible. The company's videos (featuring their products) have reached the top of numerous reddit threads, been retweeted thousands of times, and built an evangelical fandom.

Figure 28: Iconic campaigns and clothing designed for gaming



Source: Ateyo

Recent news events and highlights

- Brand new – The Ateyo Reversible Bomber – [\(link\)](#)

Beyond the Summit

Media, promotion, and entertainment

Figure 29: Beyond the Summit overview



Founded: 2012
Headquarters: Covina, CA
Employees: 25-50

Key Executives:

David Parker – Founder
David Gorman – Managing Partner
Michelle Cheng – VP Sales/Marketing
Ken Chen – Creative Director
Daniel Najarian – Content Director

Sources: LinkedIn, Beyond the Summit

Overview

Beyond the Summit (“BTS”) is an esports-focused media company that specializes in content-creation, design, and live production. The company’s Twitch channel is the third-most-viewed English channel of all time. The company is beloved for its unique style that fuses top-level competition with spirited fun while staying true to the heart of the community.

Its flagship product is the Summit Series, known for its signature blend of high level competition with casual player commentary couches and memorable content skits. The personality-focused series began in DOTA 2 and has since expanded to Smash, Counter-Strike, and the Fighting Game Community.

Since its founding in 2012, BTS has grown from a two-person DOTA casting project to a full-service media company with nearly 30 full-time employees across offices in Europe and North America. For the last seven years, BTS has consistently been one of Twitch’s most viewed channels, boasting over 16B lifetime minutes watched and a peak of nearly 4M monthly unique visitors.

BTS broadcasts are distributed in over 110 countries via digital channels and linear TV, and the company boasts over 5M total followers across various social media platforms. BTS has worked with many blue-chip brands in the past, including Twitch, Red Bull, Valve, Sennheiser, Monster, Blizzard, and Lenovo.

BTS works closely with brands, developers, and tournament organizers globally. The company is diversified within the esports sector, with established verticals as a production company, creative agency, broadcast studio, and original content house. In 2019, BTS plans to run nearly 20 live events for 7+ titles, including its landmark 25th Summit event.

Figure 30: Iconic moments from The Summit, a video series published by Beyond the Summit



Source: Beyond the Summit

Recent news events and highlights

- **February 2019** – Beyond the Summit signs major sponsorship deals with Sennheiser and Monster Energy for 2019.
- **January 2019** – Beyond the Summit unveils new 20,000 sf headquarters in Los Angeles and announces hiring of new VP of Sales and Marketing.
- **January 2019** – Beyond the Summit announces first six players invited to Ultimate Summit, the company’s Smash Ultimate event to be held March 8-10, 2019.

Cineplex

Media, promotion, and entertainment

Figure 31: Cineplex overview



Founded: 1999
Headquarters: Toronto, ON
Employees: ~13,000

Key Executives:
Ellis Jacob – President & CEO
Gord Nelson – CFO
Dan McGrath – COO

Source: Company website, company filings

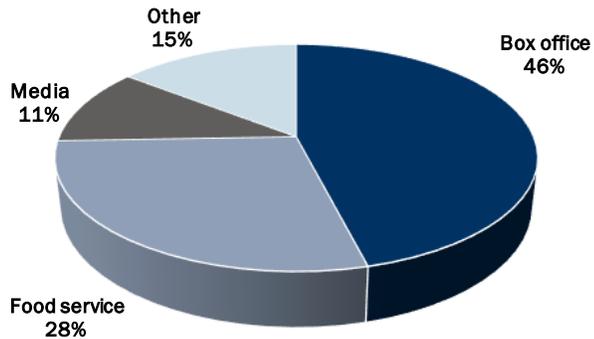
Overview

Cineplex (CGX-TSX; C\$26.50 | BUY, C\$34.00 target, Aravinda Galappathige) is a multi-faceted entertainment company that operates the largest theatre network in Canada.

The company also operates an emerging gaming business highlighted by The Rec Room, Player One Amusements and Gaming, and a joint venture to operate Top Golf within Canada.

CGX has carved a niche within the esports space as a tournament host within its theatres. We believe that CGX will look to expand its capabilities in the segment.

Figure 32: CGX revenue breakdown by segment



Source: Company reports

Recent news events and highlights

- **January 2019** – WorldGaming Network begins registration for its upcoming Call of Duty®: Black Ops 4 tournament.
- **January 2019** – NFL Canada and WorldGaming Network (CGX) kick-off Madden NFL 19 Canada Challenge.

Enthusiast Gaming

Media, promotion, and entertainment

Figure 33: Enthusiast Gaming overview



EnthusiastGaming

Founded: 2014

Headquarters: Toronto, ON

Employees: 11-50 (LinkedIn)

Key Executives:

Menashe Kestenbaum – CEO

Eric Bernofsky – COO

Gadi Levin – CFO

Source: Company Reports

Overview

Enthusiast Gaming (EGLX-TSXV, EGHIF-OTCQB | Not rated) is a digital media company building the largest community of authentic gamers both online and offline. Through its unique acquisition strategy, Enthusiast's network includes over 80 owned and affiliated websites devoted to gamers and esports with over 75M monthly visitors, and 900 YouTube gaming channels with over 50M monthly visitors. The network is one of the leading platforms for advertisers targeting the gamer demographic. Management constantly reviews potential acquisitions to drive revenue and to continue growing its network. The company intends to make accretive acquisitions by leveraging its scale; a website is more valuable to advertisers once it is under Enthusiast's banner. The company highlights that the platform generates over 12B ad requests per month.

In addition, Enthusiast owns and operates Canada's largest video gaming expo (55,000+ attendees at EGLX in Toronto during 2018) further demonstrating management's passion and commitment to the growing sector. The company launched its first expo in 2015 as a grassroots gaming event with 1,700 attendees and has since experienced steady growth with the emerging sector.

Figure 34: CG attended EGLX Expo in Toronto in October



Source: Canaccord Genuity research

Recent news events and highlights

- **January 2019** – Enthusiast Gaming announces exclusive partnership with Omnia Media and its 900 channel YouTube Network and 50M+ monthly visitors.
- **October 2018** – Enthusiast Gaming announces record breaking attendance at EGLX (over 30,000 people over three-day weekend).

Askott Entertainment

Esports gambling

Figure 35: Askott Entertainment overview



Founded: 2014
Headquarters: Vancouver, BC
Employees: 10

Key Executives:
Scott Burton – CEO
Jeremy Hutchings – CTO
Mathew Lee – CFO

Source: Askott Entertainment

Overview

Askott Entertainment provides a full suite of software solutions for the regulated online gaming space with a focus on esports. The company website highlights previous consulting engagements assisting clients with licensing, hosting, payments, security, mobile and complete product development. Some of the company’s investors include OverActive Media, Bitkraft Holdings, Shaked Ventures, and the Vancouver Founder Fund.

In addition to licensing its esports betting platform to gaming operators, Askott has its own brands. In 2014 the company launched the first esports daily fantasy site, esportspools.com, registering over 200,000 users in 160+ countries. Since then it has obtained multiple gaming licenses and has offices in Vancouver, Isle of Man, Malta, Curacao and Cyprus. Its most recent real money-betting site, ESP.bet, was the first Isle of Man licensed esports company to receive a license for crypto currency betting and virtual goods betting.

Figure 36: ESP website – in-play esports betting



Source: Esportspools.com

Recent news events and highlights

- N/A – Limited corporate updates available.

PMML Corp.

Esports gambling

Figure 37: PMML Corp. overview



Founded: 2016
Headquarters: Toronto, ON
Employees: 30-40

Key Executives:
Steven Salz – CEO
Kejda Qorri – CFO
Ryan White – CTO

Source: PMML

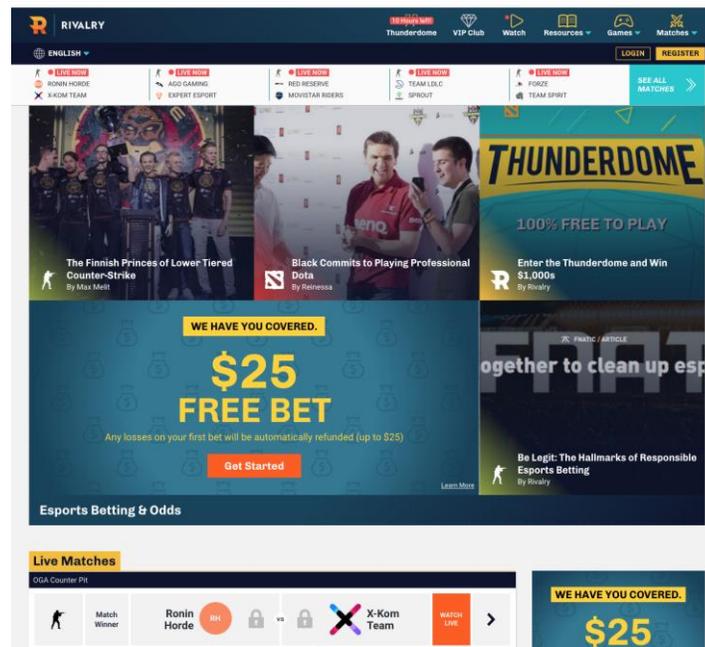
Overview

PMML Corp. is an owner-operator and investor dedicated to esports. PMML’s core business is the wholly owned Rivalry brand, an esports betting website with notable partnerships and sponsorship agreements in the esports ecosystem. In recent developments, the company announced a partnership with Fnatic, one of the world’s leading esports organizations.

As one of the first pure plays licensed by the Isle of Man, the company looks to establish a first-mover advantage in the online betting space. The monetization strategy works like any online gambling site: by taking a spread on betting lines, with margins in esports of 8-10%.

PMML also has investments in peripheral esports businesses along with a 20% stake in GG Group, an affiliated company focused on building esports media assets (content, and an esports org). The GG Group affiliation helps to keep the company’s broader media initiatives distinct from PMML’s core gambling assets.

Figure 38: Company website



Source: Rivalry.gg

Recent news events and highlights

- **December 2018** – PMML announces US\$3.0M seed round for GG Group. PMML will then be focused on the core Rivalry business, its founding ownership in Loot Market, and a 20% interest in GG Group.
- **January 2019** – Rivalry conditionally awarded casino license. Rivalry will be able to offer games of chance, in addition to the company’s current license which allows fixed odds and pari-mutuel products. Rivalry acquires .com domain. Rivalry announces Thunderdome, a free to play betting product for global acquisition.

Appendix 2: Industry primer

What are esports? Esports are a form of virtual gaming competition which includes strategy, sports, fighting, and other types of real-time multiplayer games. Highly skilled video game players compete independently or in teams across thousands of tournaments annually. Some of these tournaments are held in physical venues while others are hosted online – with both forms of competition drawing significant viewership from fans globally.

When an event isn't available locally, people can tune in from a live TV, OTT, or alternate feed. According to Newzoo, APAC markets have dominated the esports scene so far, accounting for 44% of global esports revenue and 51% of global esports enthusiasts in 2017. Some of the most recognizable esports titles include League of Legends (LoL), Defense of the Ancients 2 (DOTA 2), and Overwatch.

Figure 39: Five core revenue streams comprising US\$906M F2018E esports ecosystem

	Game Publisher Fees	Advertising	Sponsorship	Merchandise	Media Rights
Brief description	• Fees remitted to publishers and leagues for licensing rights	• Traditional sports and broadcast marketing	• Brand name investment in teams, players, and the ecosystem	• Admission fees and merchandise sold at events	• Distribution rights paid for by broadcasters and streaming platforms
2017 Revenue (US\$ M)	105	140	235	82	93
2018E Revenue (US\$ M)	116	174	359	96	161
<i>Estimated Growth YoY</i>	11%	24%	53%	16%	72%
Brands Involved					
End Markets	<ul style="list-style-type: none"> • Tournaments • Leagues 	<ul style="list-style-type: none"> • Tournaments • Broadcasters 	<ul style="list-style-type: none"> • Tournaments • Leagues • Teams • Players 	<ul style="list-style-type: none"> • Tournaments • Online sales 	<ul style="list-style-type: none"> • Viewers

Source: Newzoo, Canaccord Genuity research

The economics and the opportunity. The graphic above helps to conceptualize the esports ecosystem. Note that betting revenues, prize pools and player salaries are traditionally excluded from core esports market estimates. The revenue streams in the esports industry are divided into five broad segments:

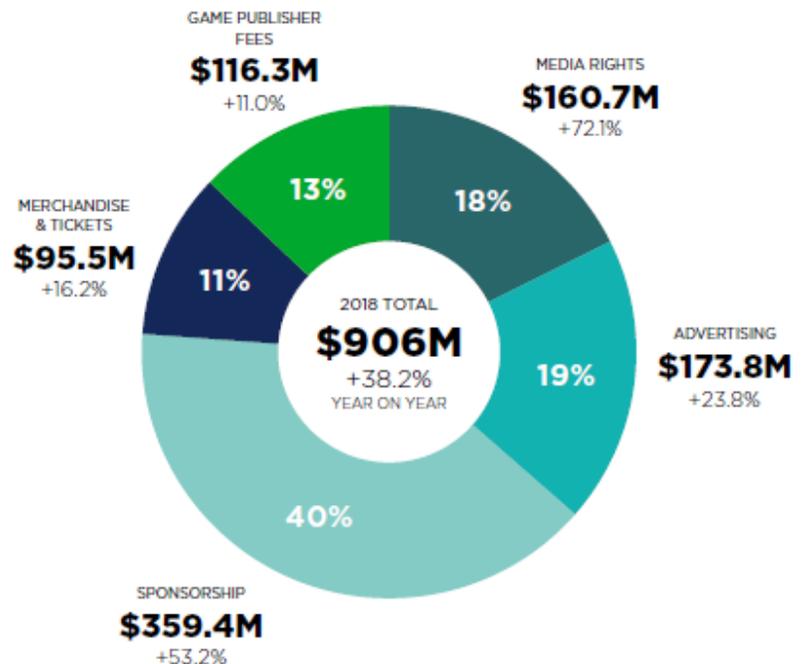
- 1) **Game publisher fees and events.** Fees are paid by independent esports organizers to run events. This includes license fees to game publishers for the rights to use the titles. Large industry events such as E3 (June 11-13 in Los Angeles) attracted as many as 69,200 attendees in 2018.
- 2) **Advertising revenues** can be thought of in the same way as traditional sports and broadcast marketing. Advertisements can appear during idle time in matches, or in the digital landscape itself, similar to brand names appearing on the boards at a hockey game. Marketers in various industries view esports as a medium for reaching younger, digitally oriented consumers.

- 3) **Sponsorship** includes brand name investment in esports players and teams. We would liken this to the BMO logo appearing on the jerseys of professional Toronto FC soccer players. Samsung, Intel, Coca-Cola, Comcast, Red Bull and more have been active.
- 4) The **tickets and merchandise** segment includes event admission fees and merchandise sold at tournaments and online. We would expect this segment to grow with the broader industry.
- 5) **Media rights**, estimated to be the fastest-growing segment, include revenue paid to industry stakeholders to secure the rights to show esports content on a channel. This includes payments from online streaming platforms to organizers and publishers to broadcast their content, foreign broadcasters securing rights to show content in their country, or copyright costs to show video content or photos of an esports competition. Broadcasters are keen to pay for access to a valuable demographic.

Sizing up the landscape. Sponsorship is expected to remain the largest revenue stream, with estimated revenues of US\$655M by 2020. The fastest-growing revenue stream is expected to be media rights, with an estimated CAGR of 49.8% from 2016-2021, compared to the overall industry at 27.4%. Content deals, as seen in traditional sports, are expected to drive growth as the market becomes larger and more stable. On the other hand, fees earned from game publishers are expected to see the slowest growth.

Digital assets as well as tangible goods. Merchandise and ticket sales will serve as an indicator of the health of esports at the local level. In 2017, there were 588 major esports events, generating an estimated US\$59M in ticket revenues, up from US\$32M in 2016. The total prize money of all esports events held in 2017 reached US\$112M, breaking the US\$100M mark for the first year. The LOL World Championship was the most watched event on Twitch in 2017 with 49.5M hours. It also generated US\$5.5M in ticket revenues.

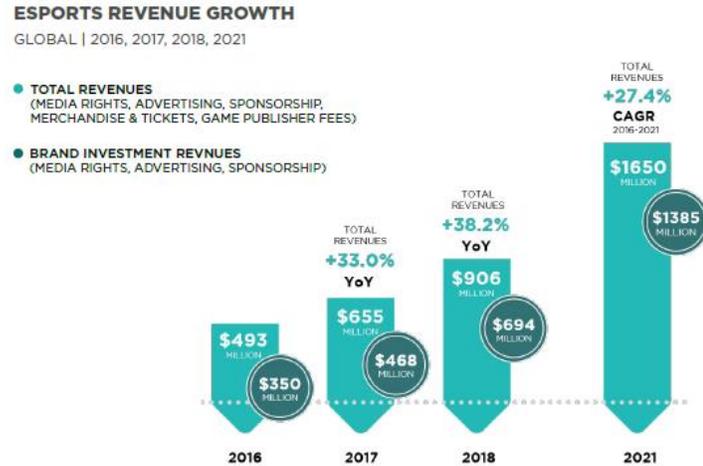
Figure 40: 2018E esports revenue (US\$)



Source: Newzoo

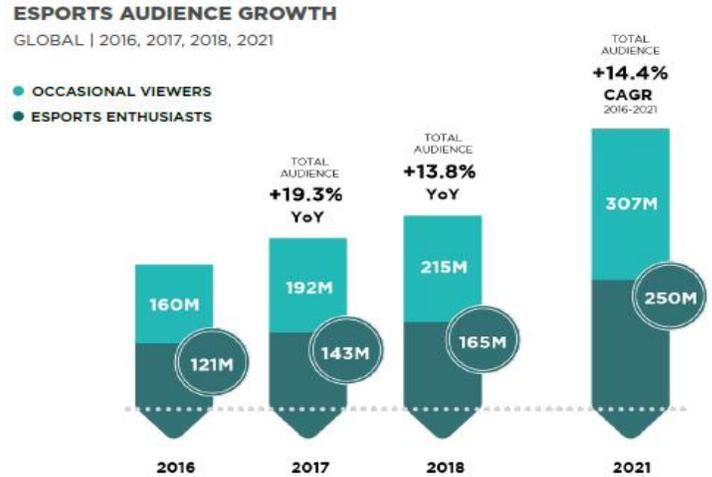
Monetizing the esports enthusiasts. To best understand the viewership statistics, it is worth defining the commonly used terms that describe the esports audience. Esports “enthusiasts” refers to consumers who watch esports more than once a month or participate in esports leagues. All other consumers are occasional viewers. Occasional viewers are the more casual segment and watch esports once or less than once per month on average.

Figure 41: Projected industry growth (US\$)



Source: Newzoo

Figure 42: Projected audience growth



Source: Newzoo

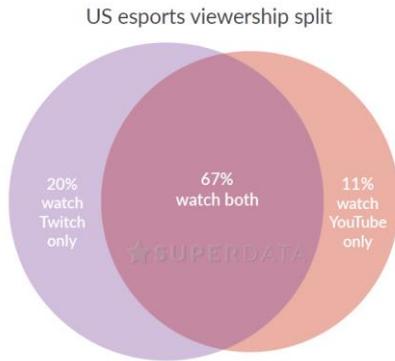
As seen in the charts above, an industry CAGR of 27.4% will ride on the back of a 14.4% CAGR in the total esports audience. Enthusiasts will continue to represent less than half of the total audience but will experience significant growth through to 2021. An amazing statistic, courtesy of Newzoo, which underscores the broadcast potential, is shown below. For the top three global esports franchises (League of Legends, CS:GO, and DOTA 2), 23% of fans watch esports content but do not play the games, and 42% do not play the games they watch. This is a great sign that people are watching esports for entertainment, and not just because they are players themselves.

Key players, stakeholders, and competitive landscape in 2018. The current landscape is populated by publishers, leagues, distributors and teams that all compete for economics. Esports teams have become a popular target for investment and a growing piece of the pie – we go into deeper detail on this topic in the body of this report.

- **Publishers.** While we previously defined five broad revenue segments above, the key beneficiary in the ecosystem is the video game publisher. The publishers wholly own the IP and therefore have disproportionate control over the entire value chain. We believe as much as 50% of the esports economics accrues to publishers. This would imply that only half the pie (US\$453M in 2018E) is available for esports teams, league organizers, and other groups. Of the five segments above, publisher fees and media rights largely flow to publishers, who also have the opportunity to share in the economics of other segments. There are similarities with the early movie industry, which started as a studio model where “major” studios wrote the scripts, shot the movies, hired the actors and even controlled the movie theaters. Over time, this vertically integrated model loosened. We expect to see the same thing in the esports sector as it matures.
- **Leagues and miscellaneous.** Esports leagues are responsible for organizing events globally. These groups will collect and manage advertising, sponsorship, and merchandise inflows. However, these tournament organizers often have to

pay significant fees to publishers to license the IP, which can weigh on profitability. Electronic Sports League (ESL) is a popular esports company which organizes competitions worldwide. The company announced a partnership with Intel in 2016 and recently opened a new office in Singapore as part of its strategy to develop the gaming scene in Southeast Asia. Major League Gaming (MLG) is another professional esports organization owned by Activision. MLG has hosted a number of tournaments throughout North America.

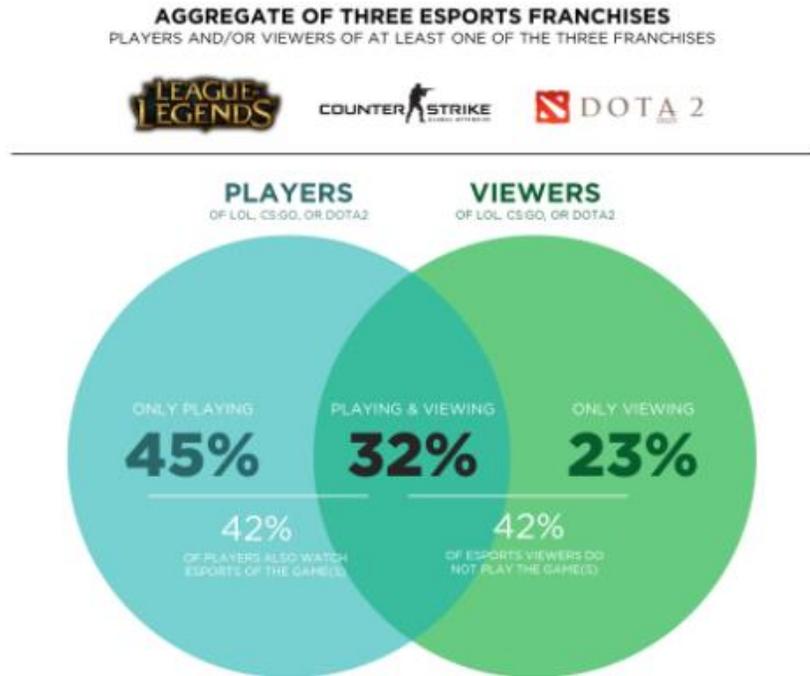
Figure 43: Twitch vs. YouTube



Source: Superdata

- Distribution.** Distribution is not thought of as part of the esports ecosystem defined above but is benefiting from the growth and has a stake in the game. These players (OTT streaming companies and broadcasters) will pay media rights to publishers and organizers so that they are able to stream and monetize the content. Cable and satellite television channels ESPN and TBS are both involved. That said, OTT streaming providers Twitch and YouTube are fully invested and currently dominate the market. Fighting for the same esports audience, their strategies differ slightly. Twitch offers highly accessible live streams while YouTube offers more curated content. As at the end of 2017, 87% of US esports viewers watched content on Twitch while 78% watched YouTube. As seen in Figure 41, the overlap is significant, but Twitch commands the lead currently on what we expect to be a more scalable business model.
- Professional teams.** The report dives into deep detail on this topic. Briefly, professional teams are forming around game titles and maintaining rosters of players to compete in tournaments globally. In short, professional teams aggregate talent and leverage the enhanced bargaining power to generate more lucrative contracts with sponsors and advertisers. Professional teams also compete to earn prize money and often sell merchandise online; however, sponsorship contracts represent the bulk of the opportunity.

Figure 44: Overlap of players and viewers



Source: Newzoo

Closing the monetization gap with traditional sports. Figure 45 breaks out the industry in terms of average consumer spend. Using older 2017 data, the average esports enthusiast spends US\$3.60 annually. While it may be early to compare esports to its traditional counterpart, the average annual revenue per fan in 2015 was US\$54 for all traditional sports. We believe the esports market has an opportunity to exceed growth expectations in both the number of consumers and revenue per user, as vendors become more innovative and persuasive with their monetization strategies.

Figure 45: Esports revenue highlights and demographic information

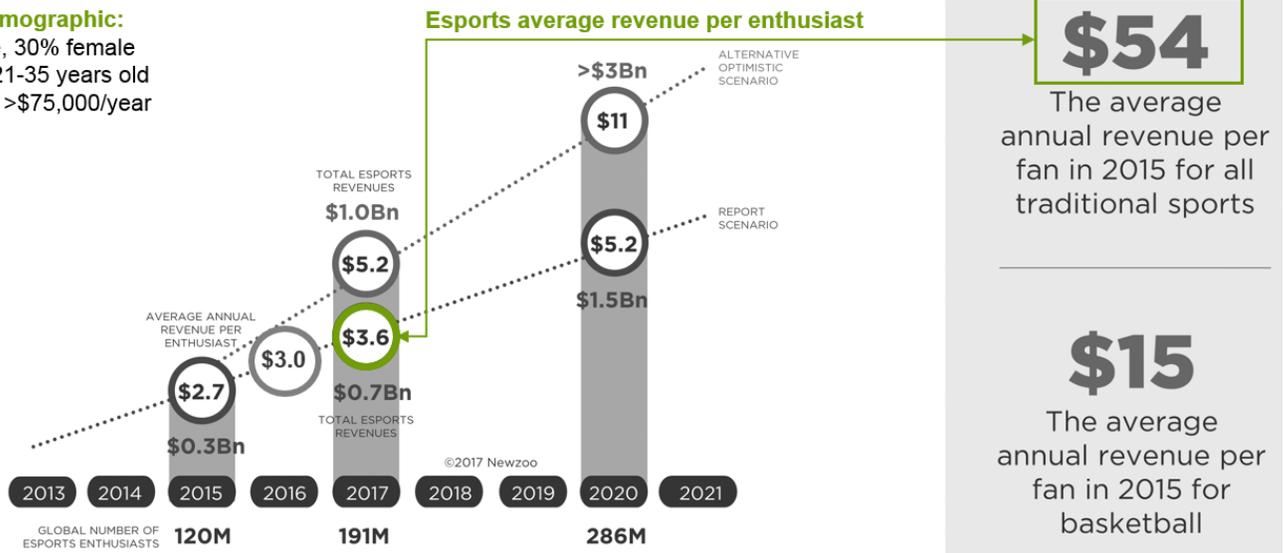
2017 esports revenue approximately \$700M

vs. NHL \$4B | NBA \$6B | MLB \$10B | NFL \$14B

*Despite larger audience base

Valuable demographic:

- 70% male, 30% female
- 53% are 21-35 years old
- 43% earn >\$75,000/year

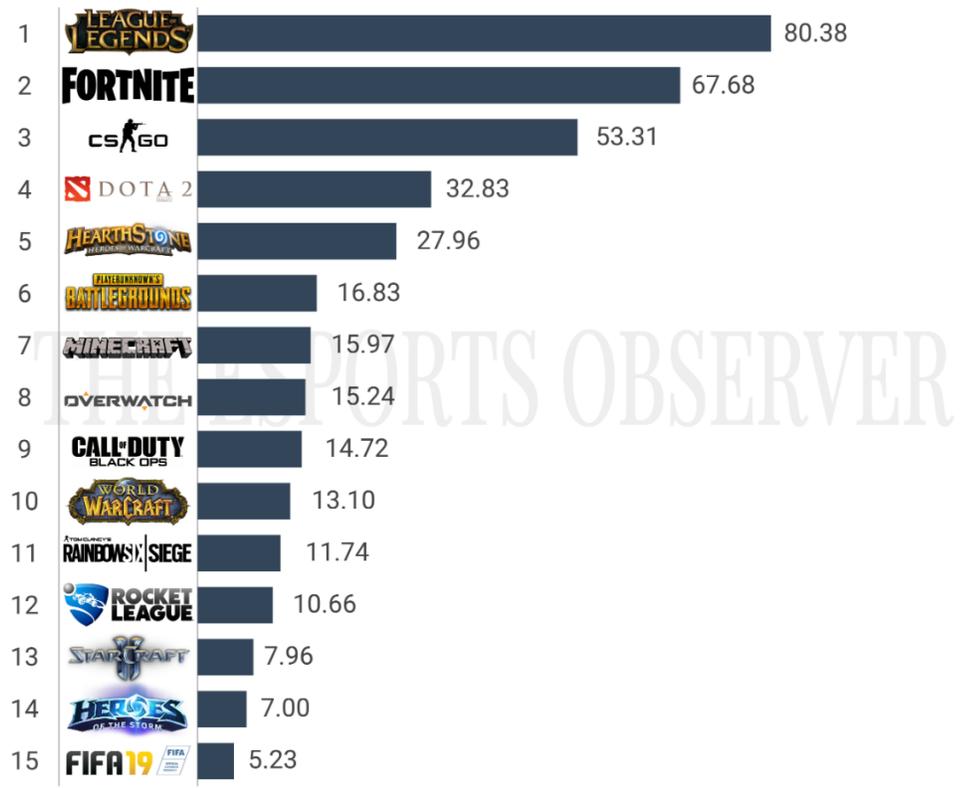


Source: PMML, Newzoo

The types of games being played. The most popular esports games are currently team-based strategy games and shooting games. Popularly called multiplayer online battle arena games (MOBA), this strategy style involves working as a team against another team to achieve a common objective. LoL and DOTA 2 are examples of this. Among shooting games, team-based formats have always been in favour but the Battle Royale format has been a rapidly growing trend. Battle Royale refers to a “last person standing wins” type of gameplay. Fortnite and PlayerUnknown’s Battlegrounds are popular examples of this format.

The chart below includes game rankings according to several relevant factors, among which is esports hours watched. LoL is well regarded as one of the most popular game titles currently, but Fortnite has climbed up the ranks spectacularly over the last year.

Figure 46: PC Games Impact Index Q4/18



Source: Esports Observer

Appendix 3: Public company valuation

Figure 47: Public company valuation with exposure to esports ecosystem

Company	TICKER	Price	Mkt Cap (US\$000s)	EV / S		EV / EBITDA		P / E		C2019 / C2018		Margins		Price Change (%)			
				C2019E	C2020E	C2019E	C2020E	C2019E	C2020E	Revenue	EPS	GM%	EBITDA%	YTD	3 Month	6 Month	1 Year
Game developers and publishers																	
MICROSOFT CORP	MSFT	US\$ 105.25	\$ 807,500	5.6x	5.0x	12.8x	11.1x	21.0x	18.0x	10%	13%	65%	44%	4%	-4%	-3%	19%
TENCENT HOLDINGS LTD	700	HK\$ 352.00	\$ 427,018	7.3x	5.8x	21.4x	17.1x	35.1x	28.2x	29%	19%	49%	45%	12%	30%	-5%	-14%
NINTENDO CO LTD	7974	¥ 29,315	\$ 37,598	2.3x	2.4x	8.3x	7.7x	13.6x	12.6x	11%	32%	38%	21%	0%	-19%	-20%	-32%
ACTIVISION BLIZZARD INC	ATVI	US\$ 40.11	\$ 30,606	4.1x	3.8x	11.2x	9.8x	15.9x	13.8x	-2%	-3%	64%	34%	-14%	-27%	-43%	-40%
NETEASE INC	NTES	US\$ 240.15	\$ 31,539	2.2x	1.9x	16.7x	14.1x	3.1x	2.6x	25%	20%	48%	14%	2%	8%	7%	-18%
ELECTRONIC ARTS INC	EA	US\$ 97.24	\$ 29,133	5.0x	4.7x	15.2x	13.7x	22.9x	20.4x	5%	9%	75%	32%	23%	9%	-26%	-19%
TAKE-TWO INTERACTIVE SOFTWARE	TTWO	US\$ 93.44	\$ 10,574	3.2x	2.9x	12.0x	10.8x	18.9x	16.3x	-4%	4%	50%	18%	-9%	-17%	-27%	-14%
BANDAI NAMCO HOLDINGS INC	7832	¥ 4,755	\$ 9,556	1.2x	1.1x	7.8x	7.2x	0.2x	0.2x	3%	6%	36%	15%	-3%	0%	16%	32%
UBISOFT ENTERTAINMENT	UBI	€ 68.82	\$ 8,649	3.5x	3.2x	6.8x	6.4x	20.4x	17.6x	9%	11%	83%	47%	-2%	-5%	-27%	8%
Average				3.8x	3.4x	12.5x	10.9x	16.8x	14.4x	10%	12%	56%	30%	1%	-3%	-14%	-9%
Media, entertainment, and promotion																	
AMAZON.COM INC	AMZN	US\$ 1,591.00	\$ 781,504	2.9x	2.4x	18.8x	14.6x	43.7x	32.1x	19%	26%	40%	12%	6%	-7%	-16%	19%
ALPHABET INC-CL A	GOOGL	US\$ 1,102.12	\$ 763,530	5.0x	4.2x	11.2x	9.6x	20.2x	17.5x	21%	1%	56%	26%	5%	2%	-12%	5%
WALT DISNEY CO	DIS	US\$ 109.44	\$ 163,151	3.1x	2.9x	10.5x	10.4x	15.6x	15.3x	3%	2%	45%	29%	0%	-7%	-3%	6%
NEXON CO LTD	3659	¥ 1,629	\$ 13,188	3.9x	3.7x	9.1x	8.4x	15.6x	15.1x	7%	-8%	76%	43%	15%	36%	11%	-14%
HUYA INC-ADR	HUYA	US\$ 19.36	\$ 3,946	3.0x	2.2x	34.8x	17.8x	6.2x	3.6x	53%	78%	12%	-4%	25%	2%	-40%	N/A
CINEPLEX INC	CGX	C\$ 26.50	\$ 1,262	1.3x	1.3x	8.2x	7.5x	18.9x	16.2x	5%	13%	69%	16%	4%	-24%	-9%	-20%
ENTHUSIAST GAMING HOLDINGS	EGLX	C\$ 1.09	\$ 37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NMF	9%	-1%	85%	85%
Average				3.2x	2.8x	15.4x	11.4x	20.0x	16.6x	18%	19%	50%	20%	9%	0%	2%	14%
Gaming hardware																	
INTEL CORP	INTC	US\$ 48.77	\$ 219,319	3.2x	3.1x	7.0x	6.6x	10.8x	10.4x	0%	1%	62%	46%	4%	5%	0%	9%
NVIDIA CORP	NVDA	US\$ 146.45	\$ 89,335	7.4x	6.1x	22.8x	17.6x	26.8x	19.2x	-5%	-16%	60%	39%	10%	-23%	-43%	-36%
SONY CORP	6758	¥ 4,875	\$ 56,069	0.6x	0.6x	4.4x	4.1x	10.6x	10.1x	2%	-21%	27%	14%	-8%	-20%	-19%	-6%
ADVANCED MICRO DEVICES	AMD	US\$ 22.96	\$ 23,082	3.4x	2.8x	21.5x	16.5x	35.2x	23.8x	5%	43%	38%	10%	24%	21%	20%	97%
LOGITECH INTERNATIONAL	LOGN	Sfr 35.29	\$ 6,079	1.8x	1.7x	13.8x	12.4x	17.2x	15.7x	8%	6%	35%	12%	14%	-1%	-22%	-2%
RAZER INC	1337	HK\$ 1.48	\$ 1,688	0.9x	0.7x	37.4x	12.8x	NMF	NMF	46%	-129%	29%	-24%	41%	18%	-18%	-50%
TURTLE BEACH CORP	HEAR	US\$ 15.75	\$ 224	1.0x	0.9x	5.9x	5.2x	9.4x	8.8x	-15%	-42%	34%	19%	10%	3%	-47%	804%
Average				2.6x	2.3x	16.1x	10.7x	18.3x	14.7x	6%	-23%	41%	16%	14%	1%	-18%	117%
Overall Average				3.3x	2.9x	14.4x	11.0x	18.1x	15.1x	11%	-4%	50%	23%	7%	-1%	-10%	37%

Priced as at 11 February 2019
Source: Bloomberg LLP, Canaccord Genuity Research

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