AGFINSIGHTS

MARKETS

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E-Sports: An Olympic Sized Opportunity

Early Days in a Fast Growing Phenomenon

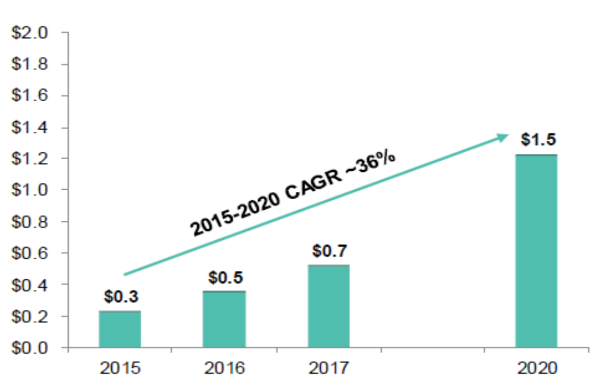
In mid-January 2018, Activision Blizzard's Overwatch League made its debut, with 12 franchises representing major cities around the globe. Overwatch is a multiplayer first-person shooter video game, where players are assigned into two teams of six, working together to secure and defend control points on a map. The league launched with a number of well-known franchise owners, including Kroenke Sports & Entertainment (owner of Arsenal F.C., the NFL's L.A. Rams, the NBA's Denver Nuggets and the NHL's Colorado Avalanche), Jeff Wilpon (COO of MLB's New York Mets) and Robert Kraft (owner of the NFL's New England Patriots).

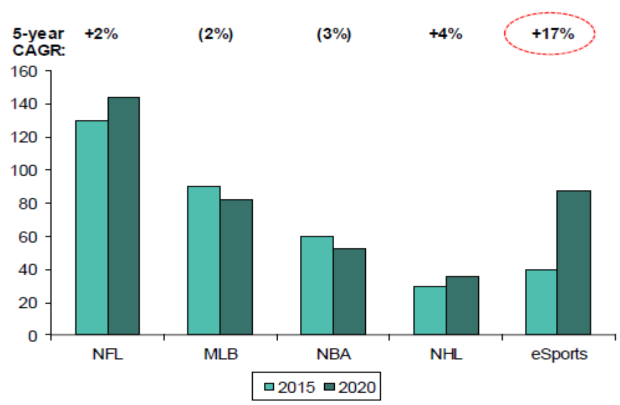
Why do all these sports executives and ownership groups see an opportunity in e-Sports? In an interview with CNBC, Kraft offered that *"We see in the NFL that millennials and the 'Z' generation are consuming things differently through their mobile device. They're playing games hours and hours a day, not watching sports the way we did."*

Indeed, e-Sports is a large, fast growing phenomenon in the world of media. New games, leagues, teams, streaming deals and advertising agreements are being created in an evolving ecosystem. Viewership has grown at a robust pace to levels comparable to major sports leagues. In 2016, the League of Legends World Championship finals were watched by 43 million people, with the peak concurrent viewership for the final matchup reaching 14.7 million[1]. In comparison, the deciding game six of the 2017 NHL Stanley Cup Finals reached a peak TV audience of 9.5 million viewers[2]. And with high penetration among millennials, e-Sports viewership growth in the future is expected to outpace other major sports leagues.

Once a niche novelty (competitive video-gaming), e-Sports now must be taken seriously. So much so, that recent reports have indicated that e-Sports is in consideration for inclusion at the Summer Olympic games, potentially as early as 2024 in Paris.

Figure 1 – E-Sports Revenue Breakdown (LHS) and U.S. Sports Viewership – millions (RHS)



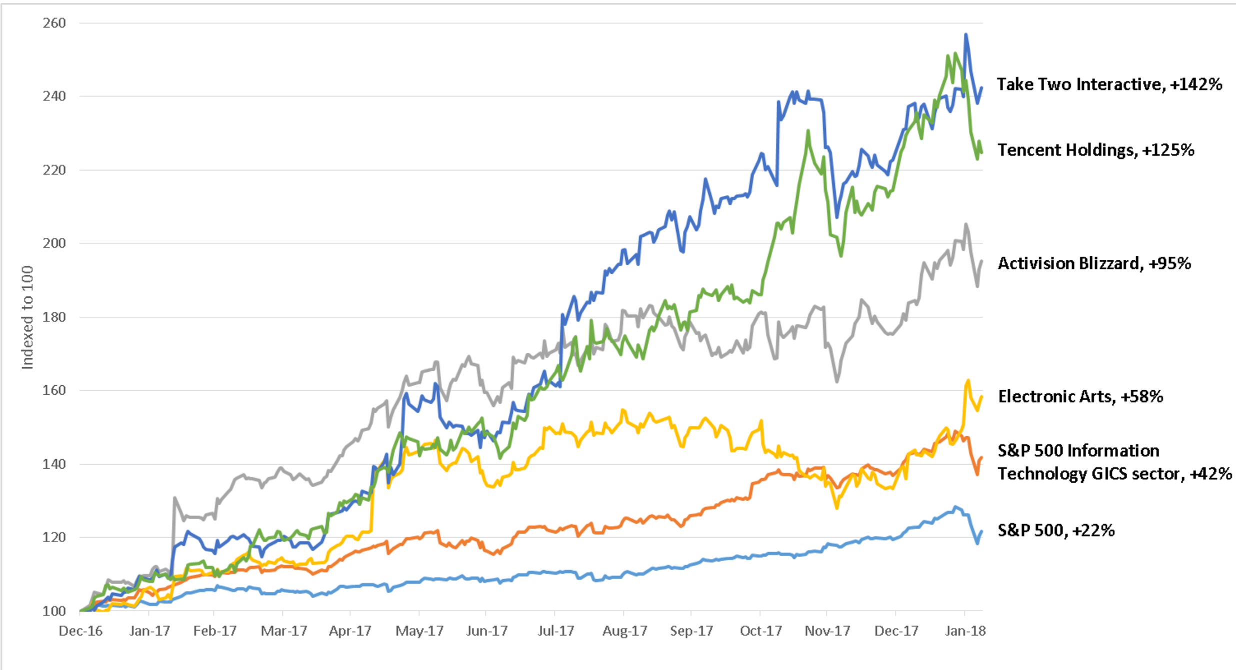


Source: Bernstein Research, as of January 2018

[1] Source: Riot Games, as of December 2016
[2] Source: NBC Sports press release, June 12, 2017

Investors would be well-served to similarly have a serious look at the nascent industry. E-Sports as a theme has become a catalyst for video game related stocks, which have been some of the best performers over the past year. Since the beginning of 2017, video game publishers have strongly outperformed the broader market and the broader information technology sector, with major players such as Activision Blizzard, Take Two Interactive and Tencent Holdings doubling their value.

Figure 2 – Gaming Company Performance vs. S&P 500 and Information Technology sector since Jan 2017



Source: Bloomberg, as of February 7, 2018

An Evolving Ecosystem

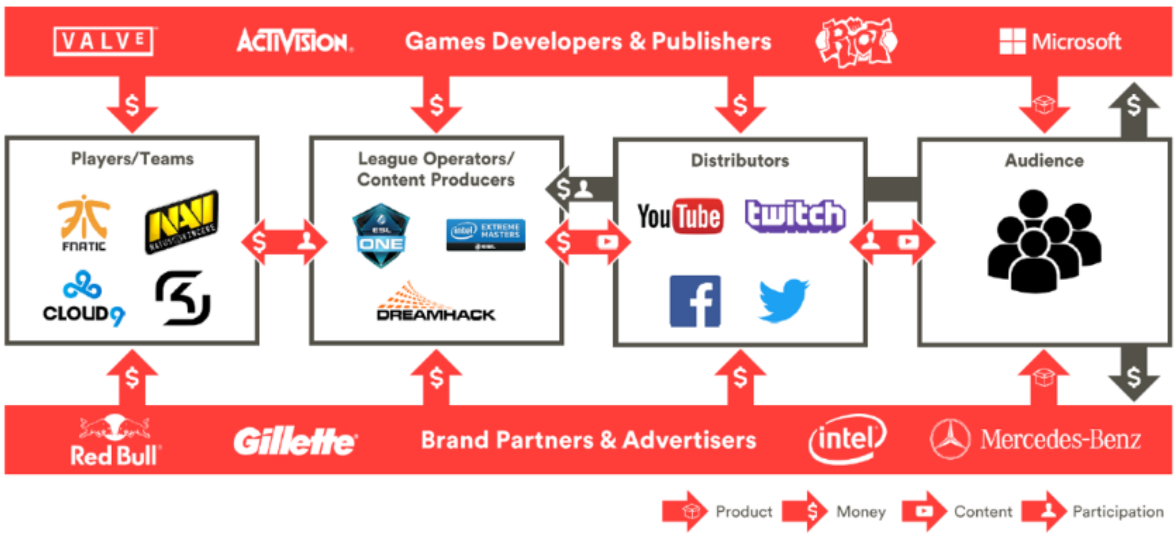
Who are the major players in the e-Sports landscape? There are several major layers of involvement in e-Sports – for investors, the most relevant groups include publishers, distributors and "arms dealers" (companies that manufacture the equipment required to play).

Game publishers develop and market video games worldwide, owning the commercial rights to the game and licensing the content to third parties including league operators. The major publishers include Riot, a subsidiary of Tencent Holdings (*League of Legends*), Activision Blizzard (*Overwatch, Hearthstones, Starcraft, Call of Duty*) and Microsoft (*Halo 5, Gears of War*).

There are also distributors who help e-Sports reach a worldwide viewing audience. The biggest online distributor is Twitch (owned by Amazon) which has approximately 220 million monthly unique viewers. Mixer (owned by Microsoft), is a competing live streaming platform that will be integrated with the Xbox One dashboard. YouTube Live gaming (owned by Google) also has a broad mix of games, videos and live streams. There is also speculation that Google is working on a subscription gaming service code-named "Yeti" that could work with Chromecast or a Google-made console. In 2017, Facebook also moved into the distributor field with a partnership with ESL. In terms of market share, Twitch currently leads in the total number of average concurrent streamers (54%) and viewers (65%) that are live at any given point by a wide margin, with YouTube Gaming second (33% of streamers and 38% of viewers), according to data collected by Stream Labs over a seven-day period towards the end of calendar Q2 2017.

Another segment of the ecosystem are the arms dealers. E-Sports athletes need the best equipment – mice and keyboards – that offer the best latency, grip and feel. Major players include Logitech and Razer.

Figure 3 – The E-Sports Ecosystem



Source: Morgan Stanley Research, as of January 2018

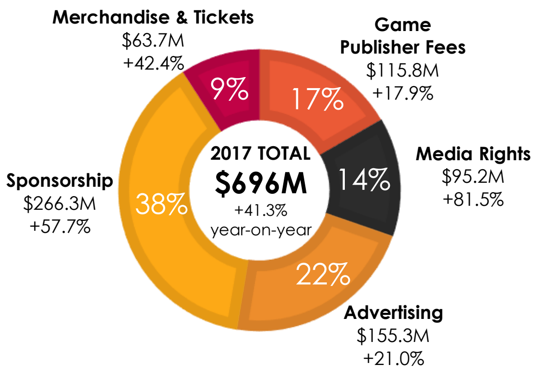
A Significant Long-Term Monetization Opportunity

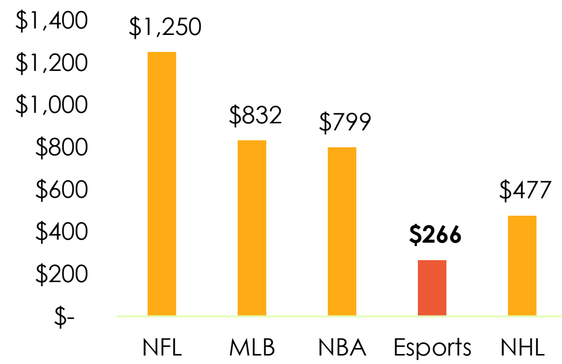
E-Sports has the potential to become a meaningful new revenue stream for the video gaming industry. Firstly, from the publishers' perspective, there is increasing incentive for video game publishers to turn their games into an e-Sport in order to increase customer engagement and create new revenue streams from in-game content (e.g. revenue from in-game sales such as payment for upgrades, special abilities, maps, special items, expansion packs, etc.), all in a competitive environment.

Media rights are another fast growing revenue stream. Media rights for the e-Sports industry were worth US$95 million in 2017, representing the fastest growth area of the e-Sports economy with 82% growth year-over-year, according to Newzoo, an independent e-Sports market research provider, In December 2016, BAMTech, a subsidiary of Disney, paid US$300 million in a seven-year deal for exclusive rights to stream and monetize Tencent's *League of Legends.* In January 2018, Twitch (Amazon) signed a two-year, US$90 million deal to stream the Overwatch League. Although these revenue streams are still in their infancy, these deals represent high water marks for the industry. However, at the moment, neither are material to Tencent or Activision's bottom lines. Looking ahead, the value of media rights will hinge on what content aggregators think they can earn from selling ads to a fast growing e-Sports audience.

Other areas of growth for the industry in 2017 include sponsorship deals (58% year over year growth), merchandise and tickets (42% year over year growth), and advertising (21% year over year growth). Sponsorships, estimated to grow by Newzoo from US$266 million in 2017 to $655 million by 2020, are still significantly below major U.S. sports leagues, but starting to approach those levels, though it is important to note that these figures are comparing a single sports league to worldwide competitive video gaming.

Figure 4 – Revenues per Stream (LHS), Brand Spending on Major U.S. Sports vs Global E-Sports (RHS)





Source: Newzoo, Morgan Stanley Research (LHS), IEG Research and Cowen Research (RHS) as of January 2018

Conclusion – Covering the E-Sports Bases

Our investments give us broad-based exposure to the e-Sports landscape, including publishers (Activision Blizzard), streamers (Amazon), graphics designers (NVIDIA) and arms dealers (Logitech). Although NVIDIA shares have appreciated significantly due to exposure to themes like artificial intelligence and autonomous vehicles, let's not forget that NVIDIA's core business remains gaming. NVIDIA CEO Jensen Huang, in the opening remarks of the company's Q3 (October) F2018 conference call, stated "e-Sports remains one of the most important secular growth drivers in the gaming market, with a fan base that now exceeds 350 million." NVIDIA's gaming revenue, which continues to be a major driver of the stock, was US$1.56 billion in Q3, up 25% year over year.

We have also made an investment in Activision Blizzard. Of the North American publishers, Activision has been the most vocal about their aspirations in e-Sports. We believe CEO Bobby Kotick is taking a visionary approach in his attempts of building a professional e-Sports league. Activision has invested in a dedicated 50,000 square feet e-Sport arena in Burbank, California, that will accommodate 450 people and house multiple stages, broadcast stations and practice facilities. The caveat, however, is the possibility that e-Sports do not make a financial impact in the near-term. In terms of a base case monetization of the Overwatch League, sell-side consensus estimates range from ~US$100 million in revenue and ~$0.01-$0.02 in EPS contribution in F2018. A bear case would result in ~US$20 million in revenue and a loss of $0.03 in EPS. However, if successful, Morgan Stanley paints a bull case of US$720 million in revenue and $0.37 in EPS, equating to $11/share upside. Electronic Arts and Take-Two have not invested in e-Sports to this extent, suggesting that organizing and housing these events are not their core competency.

We have also invested in Logitech. Logitech stated in their latest conference call that gaming group sales were up 57% year over year, the 10th straight quarter of double-digit growth. The company believes that they have the best technology in gaming, including the sensor that goes into the mice and switches that go into the keyboard, solving lag time and latency issues gamers face.

And then there is Amazon. The vision of the US$940 million Twitch investment in 2014 is becoming more apparent. Twitch and Lumberyard (Amazon's new service for helping developers build games) offer developers the tools to help create games that allow players to interact directly with the people watching them play and vice versa. But the real vision is that all of this is hosted on Amazon Web Services, and as gaming becomes a massive opportunity, Amazon and Twitch form the cloud-computing backbone for game developers. We agree with Amazon's vision.

In conclusion, e-Sports is still an industry in its infancy, but one with the potential to disrupt the entertainment paradigm, opening new revenue streams for companies involved in its ecosystem.

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