

# Relationships Between Fans of eSports and the Cleveland Cavaliers

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## 1. Introduction

This project explores the relationship between the fanbases of the Cleveland Cavaliers and the most popular eSports games, professional leagues, and teams through an analysis on the shared followers between Twitter accounts of Cavaliers-related pages (team, players, fan services) and major eSports pages (games, teams, leagues). The analysis focuses on four key areas: (1) the current state of the eSports industry (2) general overlap statistics between Cavaliers and eSports fans, (3) Cavalier fan gaming preferences, and (4) the eSports brand strength of 100 Thieves, subject of the Cavalier's most recent eSports investment. The goal of this analysis is to provide insight into the most popular eSports brands amongst Cavaliers fans and to identify opportunities for the Cavaliers to expand their eSports presence.

## 2. Analysis

There were two primary components of this analysis: (1) Twitter page overlap to determine mutual fans and (2) current eSports industry data for insights into key differentiators of Cavaliers fans compared to the general public. Data for (1) was obtained by using Python to scrape all followers of over 50 Cavaliers and eSports related Twitter pages and group unique followers of different pages to analyze overlap data from different perspectives. Data for (2) was obtained via publicly available eSports industry data on [www.esportsearnings.com](http://www.esportsearnings.com) and [www.newzoo.com](http://www.newzoo.com). The following analysis focuses on interpreting this data to provide insight and recommendations towards potential avenues of growing the Cleveland Cavalier's eSports fanbase.

### 2.1 eSports Overview

The eSports industry is rapidly evolving and expanding, and it is critical for investors to keep up. In 2017, the eSports economy (total revenues from media rights, advertisements, sponsorship merchandise & tickets, publisher fees) grew to \$700M, a 214% growth from 2015. The total audience (now ~385 million worldwide) is growing at a similar rate. With this rapid expansion has come a shift in popular game genres that will be explored throughout this analysis.

This analysis will focus on four main game categories: (1) first-person shooters (FPS), (2) multiplayer online battle arena (MOBA), (3) massively multiplayer online role-playing game (MMORPG), and (4) sports. While FPS games previously reigned king for both casual and professional gamers, a relatively new addition to the eSports world – the MOBA – has quickly taken over as the leader in active player base and tournament revenues. Another previously popular game genre, the MMORPG, has also gone down in popularity in the shadow of MOBA’s and has much less potential for tournament-style play. The total active player base for sports games is difficult to measure, as many play these games offline, but the fanbase of major sports games has remained relatively steady. These trends can be seen in Table 1 below, which breaks down the magnitude of the professional and casual player bases of the top 10 games of 2017.

Rank	Game	Genre	Total Prize Money	Monthly Active Players	Professional Players	# of Tournaments
1	Dota 2	MOBA	\$36,033,224.39	12,600,000	768	134
2	Counter-Strike: Global Offensive	FPS	\$16,481,790.41	11,900,000	4177	765
3	League of Legends	MOBA	\$11,319,403.42	100,000,000	1401	101
4	Heroes of the Storm	MOBA	\$4,442,332.54	1,500,000	293	29
5	Call of Duty: Infinite Warfare	FPS	\$4,003,526.40	28,100,000	298	70
6	Overwatch	FPS	\$3,381,251.98	21,600,000	1462	248
7	StarCraft II	MOBA	\$3,242,732.44	2,400,000	279	518
8	Hearthstone: Heroes of WarCraft	Collectible Card	\$2,696,123.75	23,900,000	592	86
9	Halo 5: Guardians	FPS	\$1,695,000.00	2,000,000	90	10
10	FIFA 17	Sports	\$1,431,578.07	N/A	113	36

*Table 1. Top 10 games of 2017 in terms of total tournament prize money broken down by active player base, professional players, and number of tournaments.*

## 2.2 Cavaliers eSports Overlap

In determining the eSports connections to the average Cavaliers fan, we calculated the intersection of followers between the Cleveland Cavaliers team page (@cavs), players (grouping of several Cavaliers players), and major eSports brands. Figure 1 below displays the percentage of overlap between Cavaliers fans and the biggest eSports games. The full percentage breakdown can be found in Appendix 4a. Cleveland Cavaliers fans have a ~2% overlap between most major FPS and sports (besides NBA2K) games, professional leagues, and streaming platforms, and a ~1% overlap with most major MOBA games. The percentage of fans of these games shows marketing and investment potential, and the percentage of fans of eSports professional leagues and streaming platforms suggests that there is an existing fanbase for Cavaliers professional eSports teams / personalities. The following sections explore the opportunities within different gaming categories and the professional eSports scene.



























													
	-	39.7%	2.5%	0.2%	4.5%	1.8%	0.8%	0.2%	1.5%	12.0%	1.3%	0.5%	0.5%
	20.9%	-	2.2%	0.1%	3.6%	1.3%	0.6%	0.1%	1.0%	9.7%	1.2%	0.5%	0.3%
	2.0%	3.4%	-	1.2%	12.6%	17.0%	6.5%	1.0%	3.3%	4.0%	4.7%	2.2%	1.1%
	1.7%	2.0%	11.4%	-	9.9%	15.1%	6.9%	4.7%	12.1%	3.6%	16.3%	8.2%	15.8%
	2.1%	3.2%	7.3%	0.6%	-	5.0%	2.5%	0.4%	4.8%	8.7%	6.1%	2.1%	1.5%
	2.3%	3.0%	26.3%	2.4%	13.5%	-	8.0%	2.1%	7.2%	5.7%	9.0%	4.9%	2.6%
	2.3%	3.0%	22.0%	2.4%	14.8%	17.5%	-	3.3%	9.5%	8.3%	17.1%	7.3%	4.0%
	1.0%	1.4%	6.6%	3.4%	4.9%	9.3%	6.7%	-	22.1%	2.1%	50.5%	50.2%	7.5%
	1.0%	1.4%	2.8%	1.1%	7.1%	3.9%	2.4%	2.7%	-	1.8%	8.2%	4.3%	2.3%
	14.7%	22.6%	6.0%	0.6%	22.8%	5.6%	3.7%	0.5%	3.2%	-	4.3%	2.6%	2.0%
	1.3%	2.4%	6.1%	2.2%	13.8%	7.6%	6.5%	9.5%	12.6%	3.7%	-	15.1%	3.4%
	0.9%	1.7%	5.2%	2.0%	8.6%	7.5%	5.1%	17.2%	12.0%	4.1%	27.5%	-	4.4%
	2.0%	2.3%	5.0%	7.5%	11.6%	7.5%	5.4%	5.0%	12.4%	6.1%	11.9%	8.4%	-

Figure 1. Percentage of overlapping fans of the Cavaliers team / player pages and major eSports brands. The percentage is based on the total amount of followers of the column label, e.g. cell (3,1) suggests that 2.0% of all Call of Duty followers also follow the Cavaliers team page, while cell (1,3) suggests that 2.5% of all Cavaliers team page followers follow Call of Duty. For this reason, the percentage values for each pair (i,j) are not equal to the values for pair (j,i). \*Note that Cavs Players does not include LeBron James, Dwyane Wade, or Derrick Rose.

## 2.3 Gaming Preferences

To identify the most popular game genres amongst Cavaliers fans, we determined the overlap between followers of the Cavaliers team / players and the top 3 games within each of the following major gaming categories: sports, first person shooters (FPS), multiplayer online battle arena (MOBA), and massively multiplayer online role-playing game (MMORPG). Fans of the Cavaliers team page and fans of Cavaliers players pages were analyzed separately to identify any differences between the two fan bases. Figures 2 and 3 below displays the numbers and percentages of Cavaliers team and player fans that follow a game within the four genres. In contrast, Figure 4 below displays the percentages of the total monthly active users who play each type of game (sports genre excluded – numbers unavailable for console games).

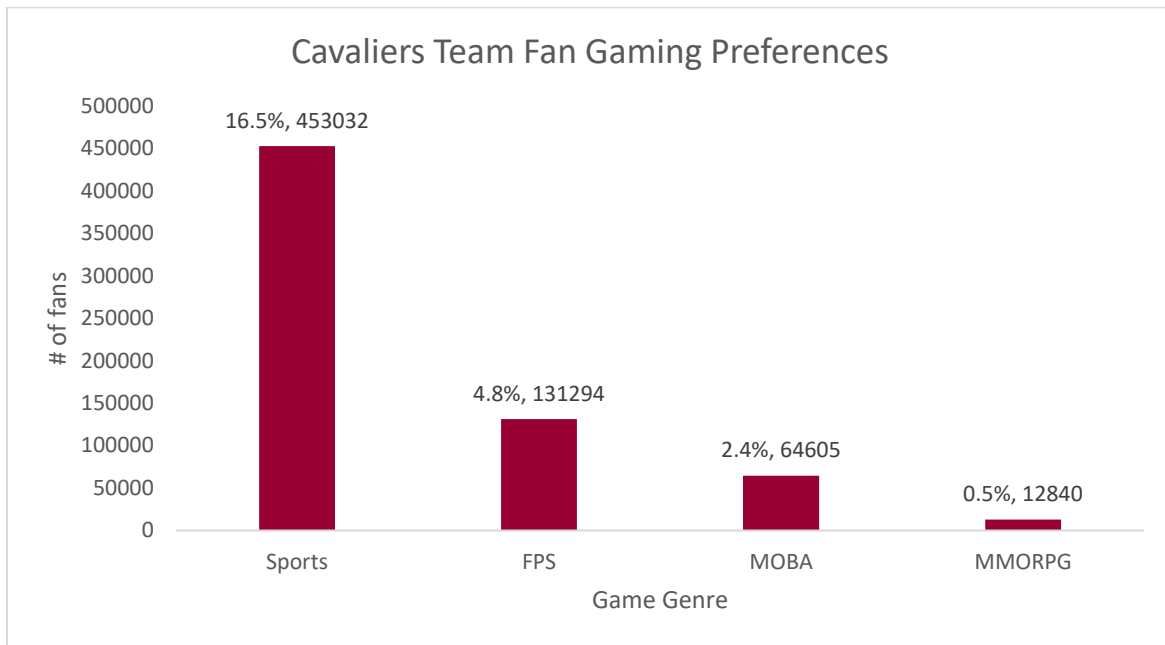


Figure 2. Percentage and number of fans of the Cavaliers team that follow each game genre. Based on top 3 games within each category.

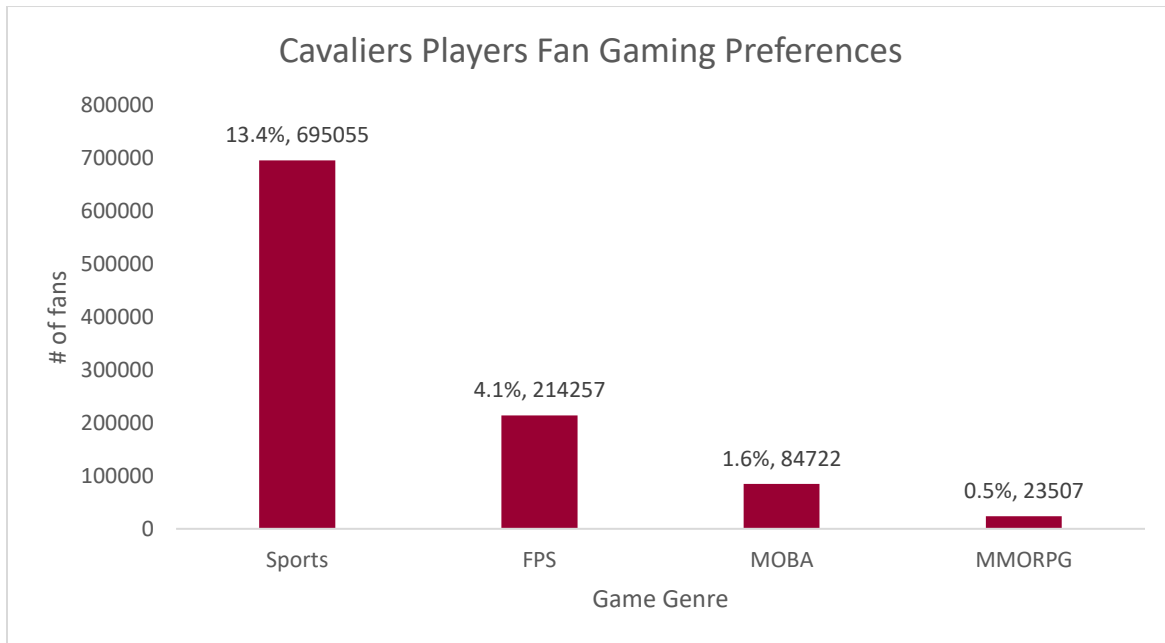


Figure 3. Percentage and number of fans of Cavaliers players that follow each game genre. Based on top 3 games within each category.

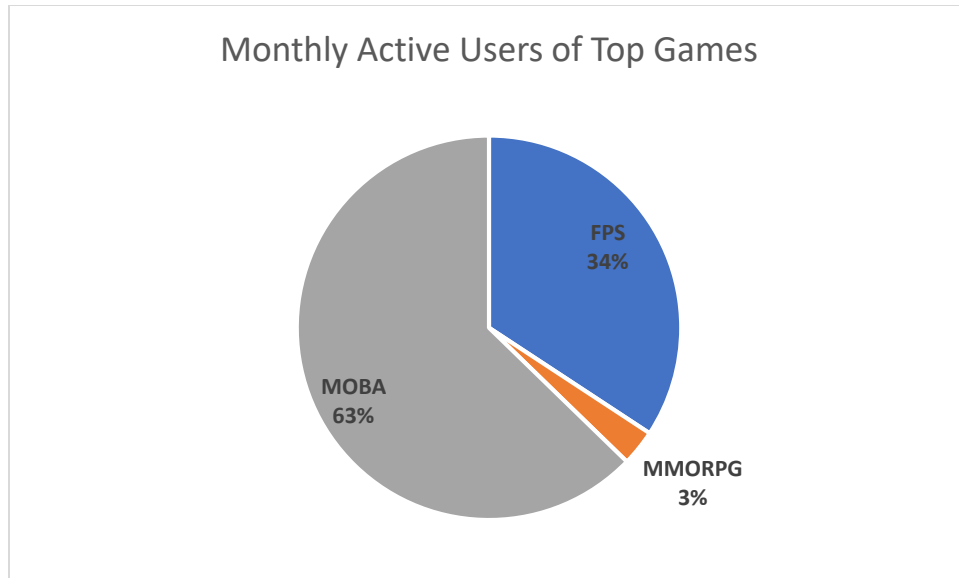


Figure 4. Percentage of total monthly active users of games analyzed in Figure 2 within each genre. \*Sports excluded due to lack of data on console games.

Figures 2 and 3 show that the distributions of fans of each gaming category within team and player fans are very similar, although fans of the Cavaliers team page are more likely to be eSports fans overall. While in general, MOBA's are roughly twice as popular as FPS's (Figure 4), there are twice as many FPS fans compared to MOBA fans within the Cavaliers' fanbase (Figures 2 and 3). This disproportionate ratio suggests that Cavaliers fans have a much stronger preference towards FPS games than the average person. As the Cavaliers focus on building a stronger MOBA fanbase through their League of Legends investments, they should also direct attention towards tapping into their much stronger and already existing FPS fanbase.

## 2.4 eSports Presence Through 100 Thieves

The Cleveland Cavaliers have recently invested in a professional team in the League of Legends North American Championship Circuit under the 100 Thieves brand and the leadership of former Call of Duty professional player, Matthew 'Nadeshot' Haag. To assess the eSports outreach of the 100 Thieves brand and identify potential avenues of expanding the Cavalier's eSports fanbase / investments through 100 Thieves, we analyzed the total number of overlapping fans between 100 Thieves Twitter pages (based on the @100thieves and @Nadeshot Twitter pages) and top eSports brands, as shown in Figure 5 below.

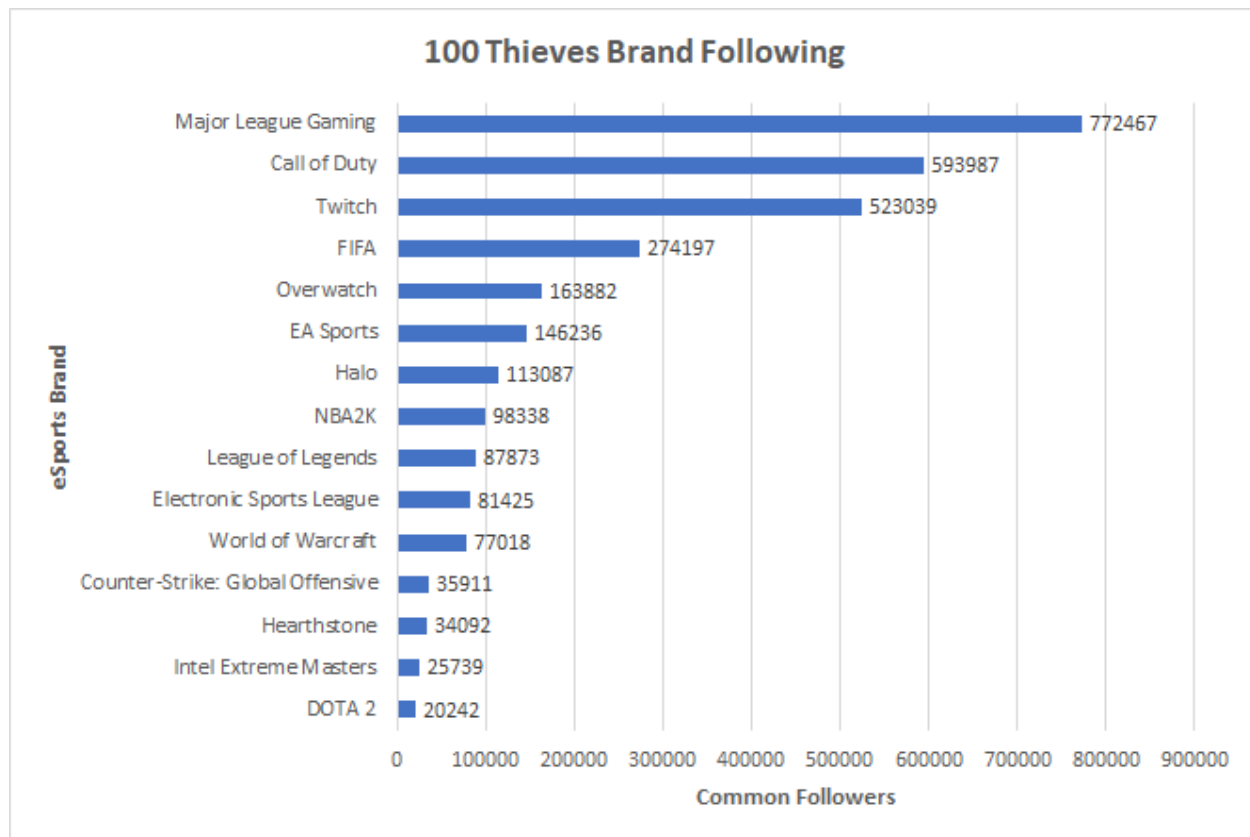


Figure 5. Number of total users who follow a certain eSports brand and a 100 Thieves Twitter page.

With roots in the Call of Duty professional scene, the 100 Thieves Brand is strongest amongst fans of FPS's and professional gaming / streaming platforms, with a moderate presence in sports and MOBA games. This distribution is similar to that of the Cavalier's fanbase, but at a much larger magnitude. Aside from building their MOBA and general eSports viewer fanbase through the League of Legends team, the Cavaliers should leverage the 100 Thieves brand to strengthen their presence within the FPS community. Figure 6 below further highlights key eSports fanbases that are strongly connected to 100 Thieves.

# Key Brand Relationships with 100 Thieves

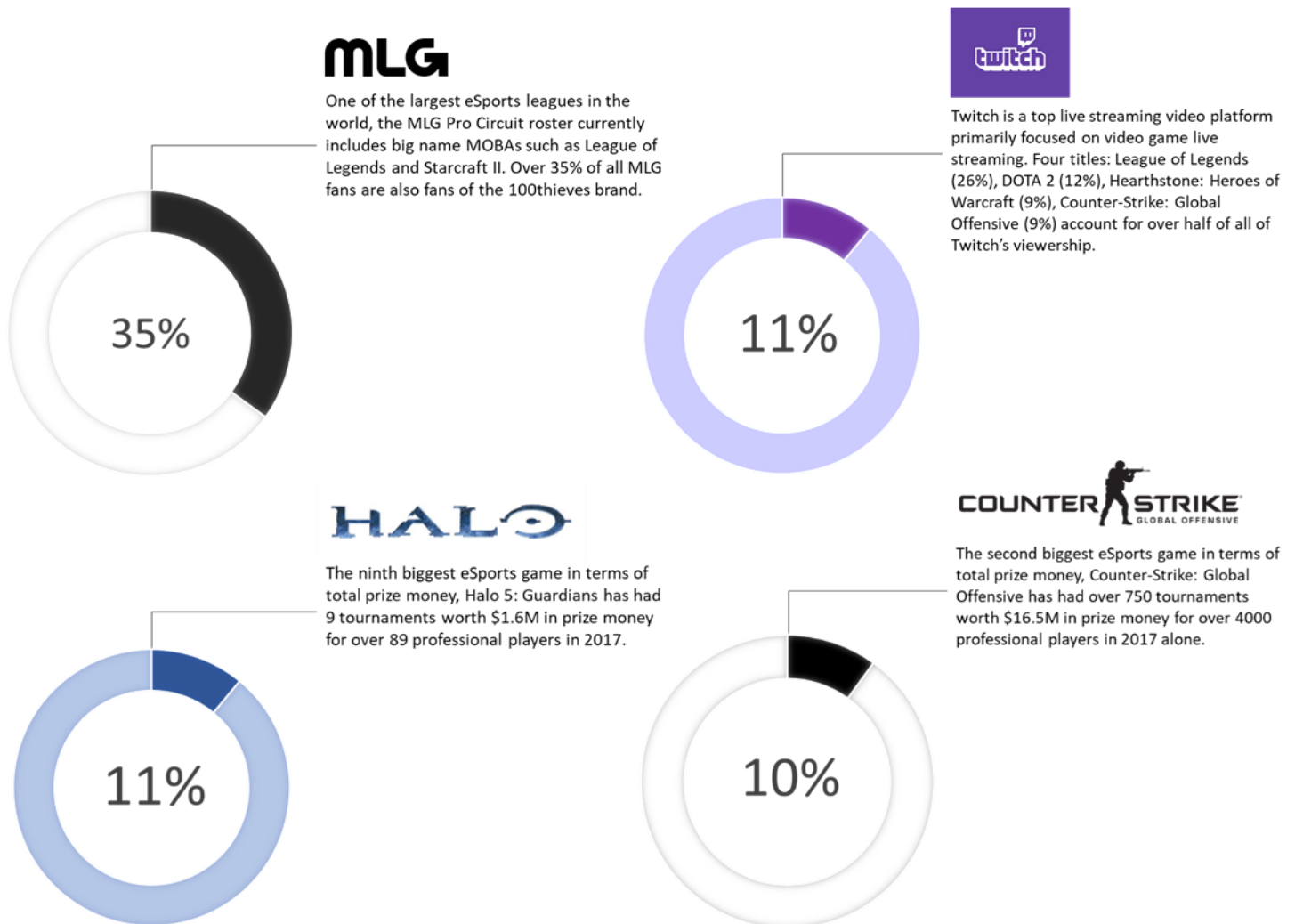


Figure 6. Key brand relationships based on percentage of total followers of eSports brands that also follow an 100 Thieves Twitter page.

## 3. Conclusions

Cleveland Cavaliers fans tend to be fans of sports and FPS games, with a lesser following (about half of the FPS following) in MOBA games. There is also a consider number of Cavaliers fans that follow eSports professional leagues and streaming services, indicating a potential viewer base for Cavaliers professional eSports teams. The Cavaliers have taken a step in the right direction by teaming with 100 Thieves to create a professional League of Legends team to grow their following in the MOBA fan community. The next step should be to leverage their existing

fanbase and new 100 Thieves brand power to create value from their large FPS community through marketing or investments.

## 4. Appendix

- 4a. Raw Twitter intersection numbers file (each cell containing a tuple (number of intersecting followers, % of total followers based on column label), e.g. cell B3 shows that 68734 users follow both CallofDuty and BlizzardCS, and 2.03% of all CallofDuty followers all follow BlizzardCS):



raw\_intersection\_numbers.xlsx