INTRODUCTION

This report looks at the eSports betting industry as a whole. eSports stands for electronic sports. It is where players compete playing computer games on a professional level. These tournaments range in size from a small gathering to 45,000 people attending a live venue with a further 27 million people viewing the same match from their homes via their computers, tablets, or smartphones. As with any form of sport and competition an associated market for betting has arisen. New types of betting have also been created specifically for the industry (Skin Betting). This sector has seen substantial growth in recent years, and this report examines which areas are seeing the increase and how the market might develop in the future. The report also describes a brief at the history of online gambling and eCommerce, considers how eCommerce compares to traditional sports, the statistics behind eCommerce betting, legal issues, types of bets and skin gambling.
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History of Online Gambling and Betting

The internet is a crucial part of life now for many people. Many people depend on access to the internet in their day to day lives. The ease of access to the internet had made an impact on many industries including that gambling industry. There's now a vast range of different gambling sites from which to choose. Some started out at the beginning of the business and others joined the market later but still managed to build up a good reputation and have been highly competitive in the marketplace.

A company called Microgaming claimed to be the first online casino and was established in 1994 and launched in 1995 with eighteen games and have grown to an estimated 30 million players in 2017. (GamblingSites, 2017) Microgaming and Cryptologic were notable companies at the beginning of the creation of online casinos. The market quickly grew, and so did the competition. In 1996 the Kahnawake Gaming Commission was established. This commission had the authority to grant licenses for online casino platforms. Regulated online casinos created a boom in the market, and today the Kahnawake Gaming Commission is one of the most well-known regulatory bodies. (Gambling Africa, 2015) Live Casinos were eventually introduced which helped establish trust in the fairness of the games on offer.

In 1997 the estimated profits of the online gambling and casino industry were estimated to be around $1 billion and grew to an estimated £10.9 billion by 2006.(Petry & Blanco, 2013) The UK release their yearly statistics for the growth in the industry and for the year of 2015 reported a £12.6 billion in Total Gross Gambling Yield which was an increase from the £11.2 billion in 2015.(UK Gambling Commission, 2016) The online gambling industry has been growing now for over 20 years and has seen continued
growth. Now with the addition of eSports to the market, we can expect to see even larger growth as it opens to new customers who will find an interest in it. Figure 1 shows the growth in Online Gambling from 2009 and predictions for the end of 2018. A key reason there is such a high amount of continued growth is down to the accessibility of online gambling. Since its launch in 1994, there has been a technology boom which has given consumers more access to the internet, and almost everybody has a computer or a smartphone these days which they can have access to these online gambling platforms. eMarketer estimates there are currently 2.4 billion smartphone users in 2017. (eMarketer, 2017)

(Figure 1.)

History of eSports

eSports is short for electronic sports. It is where players compete playing computer games.

When people think of eSports, they see it as a new form of competition. Its roots, however, can be traced back to the early 80's. It is often said there are two eras of
eSports, the Arcade Era and the Internet Era (Lee & Schoenstedt, 2011). It is estimated that as of the beginning of 2017 there are over 130m eSports fans and enthusiasts. The Atari Space Invaders tournament held in 1980 is the first recorded major competitive gaming event with around 10,000 entrants. There were much smaller events held around the globe before this contest, but the Atari Space Invaders tournament is often credited as the first official eSports tournament. For the first decade of eSports competitions, it was mainly focused on scores tracked by Twin Galaxies, a gaming world record organization. In the 90's eSports took a new route as new consoles arrived on the market. With access to new cheaper consoles, more people became interested in playing in tournaments in games such as Street Fighter 2. There was also the development in multiplayer games such as Doom which allowed players to play together using a LAN, or local area network, (meaning players could connect their PC's to play with each other in the game) which added a new layer of competition. The first major tournament for Street Fighter 2 was held in 1996 and became an annual event. Two vital games to the growth of eSports launched in the 90's as well (Starcraft and Quake). These two games pushed eSports forwards and have had many larger tournaments since with big prize pools. In the early 2000's with services such as Xbox Live being released eSports was yet again pushed forwards with players being able to compete on a competitive level while remaining at home in games such as Halo and Call of Duty. The eSports boom began in the second half of the 2000's as games like Starcraft and Counter-Strike became mainstream. This is also the time where some of today's larger teams were formed such as Fnatic and TSM. Full acceleration on eSports becoming a mainstream form of media started in the 2010's after the launch of League of Legends and Dota 2. Both these games were subject of significant tournaments and grew viewership substantially. Today League of Legends has over 100 Million players and is still growing. eSports is now bigger than ever, with more teams, more players,
more tournaments and more games and we can only expect even more future growth. What helped eSports become mainstream was the addition of many streaming services such as Youtube and TwitchTV. This allowed users to watch live eSports games and connect with other like-minded gamers. (British eSports Association, 2015) Services such as TwitchTV were a crucial milestone in eSports becoming a spectator sport as it allowed users to watch live games as they unfold.

**eSports Compared to Traditional Sports**

**eSports and Betting**

eSports and betting go hand in hand. It works similarly to the way one bets on a traditional sport. Different types of bets can be placed in the eSports betting environment, and these include; Outright Bets, Match Bets, Handicap Bets, Accumulator Bets and Special Bets. (e-sports betting, 2017) Each of these is covered in more detail later in the report. There are also three different types of bets that can be placed; Cash bets, Skin bets, and Crypto Currency Bets. (Grove, 2016) Each of which is covered in more detail later in the report. Since there have been forms of competition, people have wanted to place bets on them. There is a chance to win big, and participants enjoy the risk. "Some gamble because they enjoy the challenge or competition and others just find it fun" (BigDeal, 2016) Some consumers support teams and wish to place bets on their side in the hope that they will win and know their faith in an organization is paying off.
eSports Betting Statistics

The eSports betting market is enormous and ever growing. The estimated figures just back up how huge the market is. In 2016 it is estimated that $5.5 Billion was wagered on major eSports titles worldwide. It is estimated in 2020 the growth will be to around $12.9 Billion. This is over 100% growth in just four years thus clearly showing just how quickly the market is expanding. There is also an estimate of 6.5 Million unique participants placing wagers on eSports games. ($12.9B / $6.5M = $1,984) To reach this estimate on average, a customer would be placing ~$2000 in bets. Although this may seem a large amount, this is well below the average of the mainstream sports betting and traditional online gambling. The annual loss on these wagers ~$100 which is lower than the average loss for traditional gambling. This often encourages more people to start placing bets. There is an expected drop off in 2017 of total bets placed, down to $3 billion from $5.5 billion. This is a direct effect of the restrictions valve placed on skin betting. Although skin betting still takes place, it is a much more restricted market which will be considered in more detail later in the report. Although there is an estimated drop in 2017, growth will continue in the following years. Figure 2 shows the expected growth in the market from 2016 through to 2020 in millions wagered.

(Figure 2.) (Grove, 2016)
In 2016 $649 Million worth of wagers were placed. $598M of which is traditional betting. $33M Was head to head bets, and $18M was Fantasy eSports. (Eilers & Krejcick Gaming, 2016)

Four key games receive 92% of all current bets in cash gambling. League of Legends has a 38% market share, Counter Strike: Global offensive has 29%, Dota 2 18% and Starcraft 2 has 7%. The other 8% is made up of a mixture of games such as Rocket League, World of Warcraft, Call of Duty, etc.

(Figure 3) (In Millions 000,000) (Grove, 2017)

Figure 3 shows the projected growth in the cash gambling market from 2016 to 2020 in millions wagered. Grey representing a Bear Market, Green an ordinary market and Blue a Bull market. Green is the most likely case out of the 3. Grey will be the probable occurrence if there are new laws and regulations established for online gambling that could impact the number of people placing bets. Blue would be the result if something occurred that boosted the market forwards unexpectedly.
Figure 4 is the growth and decline of the skin gambling market using the same color coding as Figure 3. As the graph shows, the market was healthy in 2016 and was expected to grow in the future. Valve’s new regulation, put in place to gain some control over skin betting, halted growth. I will go into this aspect in detail later in the report.

Players and consumers are the crucial part of any game. In 2017 Entertainment Software Association report suggested that 65% of American households have somebody who plays computer games regularly. 72% of all gamers are over 18 years old, with the average age of players being 35. Often people view eSports and Video Games as a male-dominated market, but Entertainment Software Association estimates that women make up 31% of the video game playing population which is more than the boys under the age of 18 which is 18%. In the past video games have been viewed negatively by others, but there has been a recent change in this, as 71% of parents feel that video games have had a positive impact on their child’s life. Another emerging market in eSports and households that play video games regularly is Virtual Reality, with ESA reporting 11% of US households owning a virtual reality headset and one-third of frequent video game players saying they will likely buy one within the next year.

(Entertainment Software Association, 2017)

eSports Statistics

Many people don’t realize just how enormous the eSports audience is. Larger tournaments bring in tens of millions of views. Events also manage these levels of viewership as well. In 2017 the event Intel Extreme Masters Katowice had a total of
46,000,000 unique viewers. This was for three separate games. The League of Legends World Championship in 2016 brought in 43,000,000 unique viewers with a total of 370,000,000 hours watched overall. (eSports Marketing Blog, 2017) Each year these numbers are growing larger and larger as more people discover and start getting involved in eSports.

(Figure 5) (NEWZOO, N.D.)

Figure 5 shows the growth of eSports viewership and where it is expected to go in the future. It also displays how many people are aware of eSports now, which is over 1 Billion individuals. Even individual professional player receive a high number of viewers if they stream on popular platforms such as Twitch TV, with some getting over 20,000 viewers consistently when they are online and over a million individual followers. (SocialBlade, 2017) Twitch TV is the most popular streaming platform for online gamers and eSports events. Twitch has 100+ million unique monthly viewers and 10 million daily users. Over 2.2 million people use the service to stream their games and competitions. In 2014 Amazon brought Twitch TV for $970 Million. The average amount of time spent viewing content daily by an individual user is 1 hour, 46 minutes. (DMR, 2017) Sponsorship in eSports is one of the larger forms of income for teams and players. It is estimated brands in 2017 will spend $517 million. It is also believed that
$1,220 million will be spent on sponsorships in 2020. Figure 6 shows the growth in eSports sponsorships in recent years.

(Figure 6) (Statista, 2017)

Legality of Online Gambling in the US

There is a long history of legal issues with online gambling in the US. One of the first issues faced when the first online casino was launched in 1994 was the Interstate Wire Wager Act of 1961. This act was passed to prohibit people from using telephone facilities to receive bets. (Gambling Regulation, 1998) The Wire Act criminalizes the use of "A wire communication facility for the transmission in interstate or foreign commerce of bets or wagers or information assisting in the placing of bets or wagers on any sporting event or contest." (U.S.C, 1961) The major problem that was faced with this act for Online Gambling was it was put in place in 1961 before the internet was even conceived. This brought into question if the Wire Act should cover Internet Gambling as this was not its initial intention. (Hammer, 2003)

The next Step in Online Gambling regulation was the Internet Gambling Prohibition Act (IGPA) of 1997 which was an attempt to limit Internet Gambling. It passed the Senate
by a ninety to ten vote. An essential difference between the 1997 Act and the Wire act was that the 1997 act penalized the individual bettor. It would have also included any bet that was placed over the internet. Due to a shortage of time, the House never voted on the bill so it the IGPA of 1997 did not pass Congress.

The next evolution of this act was the IGPA of 1999. The main difference between this act and the 1997 act was it didn't attempt to criminalize the individual bettor. "Rarely, in any of our gambling prosecutions will we go after individual John Smiths. We try to focus on people a little higher in the chain" (Dretzka, 2001) The act covered both Sports and Casino games online. There was no intention to amend the Wire Act but rather add a new part to it. The bill eventually arrived in the house but as the bill was given under suspended rules, it needed a two-thirds majority to pass and fell twenty-five votes short so again did not pass Congress. In December 2011, the Department of Justice announced the limitation of the Wire Act's applicability to sports betting. This allowed states to make an array of games on the internet available. This lead to a flurry of legislation at both the state and federal level. (Reilly & Smith, 2011)

So, this poses the question is online gambling legal in the United States? There is no federal law against Online Gambling in the US, there are some state laws depending on your location, but prosecution is rare. In 2011 the Department of Justice decided that it would allow states to decide for themselves whether to allow their public to partake in online gambling. (Wyatt, 2011) Although this is currently the case, there are reports from a couple of United States media outlets saying that Attorney General Jeff Sessions is planning to introduce a federal ban on online gambling. (Fenton, 2017) Jeff Sessions stated he would "revisit" 2011 Department of Justice opinion. (Brody, 2017) A few key states that have impacted the laws on Online Gambling are Delaware, which was the
first state to legalize online gambling in 2012. At the opposite end of the spectrum, there is Oklahoma, which doesn't explicitly outlaw online gambling but has laws in place that outlaw any gambling at all. In Washington State, it has been made a felony to play online poker with a possible sentence up to 5 years imprisonment and a fine of $10,000. Over time though gambling has become more accepted and laws and regulations are becoming more relaxed and soft, and even in states where there are harsh laws they are rarely prosecuted. (Bluejay, 2015)

The same Laws and Regulations for online gambling also apply for online wagering for eSports, although it is often harder to enforce. The cash side of eSports gambling (rather than skin betting) works very similarly to standard online betting. It is much harder though to enforce any laws on skin betting and crypto currencies as they are a form of currency not easily tracked.

Data for Bookmakers

When giving odds for games and events, the more data that a bookmaker has access to, the more reliable and accurate the odds can be. Different eSports games provide different levels of data. Some provide plenty and sometimes too much to handle, whereas others provide barely any. The games that provide only limited data on professional games are much harder for book makers to publish accurate odds and often mean odds on a given game will vary drastically from bookmaker to bookmaker.

If data is harder to obtain and requires more work on the bookmaker's part, there is a lower likelihood for betting to be provided for that particular game unless it is in very high demand. Valve is well known for providing data; they own two of the largest and
most widespread games that are bet on today. CS:GO and Dota 2. They provide a vast amount of data for these events which is a benefit for bookmakers who provide the best and most up to date odds. One small downside to large volumes of data is sometimes much of it can be irrelevant and make it harder to get to the core pieces of data the bookmakers want. This downside is probably outweighed by the increased flexibility it allows.

Valve provide this date through their open API's (Application Program Interface) which allows developers to extract the data they want. They use a very similar system to Riot Games who produce League of Legends, another game that is very popular to bet on. Riot is also great at providing a tremendous amount of accurate data on all professional matches. League of Legends, CS:GO and Dota 2 are the games that see that most wagers placed. The amount of data provided by Valve and Riot is crucial to the bets on these games. Games that receive fewer bets are the troublesome ones.

One of the bigger companies that is an issue for bookmakers is Blizzard Entertainment. Blizzard develops several popular eSports games. These include Hearthstone and Overwatch. Blizzard provides very little data on competitive games, and the data they do present is often not very useful from a bookmaker's perspective. Subsequently, bookmakers are taking a significant risk by allowing bets to be placed on these games as they don't have accurate data to create odds on. It is expected that this will change in the future. Businesses will want players to be able to bet on their games as eSports becomes more popular. These companies will likely support this by making data freely available. If smaller games producers start to make their data accessible, it is likely bigger developers will have to follow suit and do the same.
A great example of this is Bluehole with their recent released and hugely successful game Playerunknown's Battlegrounds. Bluehole provides ample amounts of statistics for every player in the game, from their use of certain weapons to their win rate. The game is growing rapidly which makes these statistics even more relevant and important. It's also important to get real-time data for games taking place. James Watson, head of eSports at Sportradar, says "eSports is unique. The data is available from the games themselves, of course. But it isn't necessarily available in real time." As often eSports games have a much broader depth of strategy taking place, the data required to track the games is much larger than that of a traditional sport. The other disadvantage eSports data collection has over traditional sports is the constant changes and patches to games to keep them new and up to date. These often change very pivotal parts of the game and thus can change how data is handled.

Sportradar has recently partnered with official data providers to get the most recent data as quickly as possible, rather than relying on the public data. (Longley, 2017) Sportradar has an agreement with DOJO Madness, a startup based in Berlin founded by the ESL founder Jens Hilgers. Hilgers agrees "The strategic depths are significantly higher." "Our data science team has deep game knowledge, can understand game patches, the impact they might have, and what that means for our predictive models" (Cooke, 2017)

Sportradar describes their partnership with ESL saying "Sportradar will develop a full range of products and services for ESL. On the statistics side, Sportradar has exclusive rights to process and distribute real-time match data going deep into fantasy-level detail, and will also offer live scoring delivered to customers across the globe. Moreover, Sportradar's Fraud Detection System will monitor 450 betting operators around the world to ensure ESL has the best and broadest insight into any suspicious betting
patterns and behaviors around its competitions." (Sportradar, 2017) This partnership overall looks very positive for data collection for eSports and a positive step in the direction that will help bookmakers.

Working with Developers

Different developers have different views on allowing eSports betting within their games. Some oppose it, whereas others will help to grow the scene. Although regardless of whether or not a developer is opposed to bets being placed for matches taking place in their game, if there is the demand for it then bookmakers will find a way to meet that demand. Psyonix (the developers of the popular game Rocket League) has expressed disapproval of their game being used for online gambling. The popular betting site Unikrn announced they added Rocket League to their site to be bet on. (Batchelor, 2017) Psyonix responded to the news in an interview with GameSpot. Psyonix VP of Publishing told GameSpot "Psyonix is not affiliated with Unikrn, nor do we support or endorse online betting for our game." (Makuch, 2017) Although Psyonix owns the IP of Rocket League, they are not able to stop Unikrn from providing the game for users to bet on. This could lead to possible problems eventually, but so far nothing has occurred. This is one major difference for bookmakers providing eSports as a service. For traditional sports, nobody owns the IP of football or tennis, so there would be no obvious issues for a bookmaker to provide these sports for their customers to bet on. Whereas in eSports, every game being played has a company which owns it. If they are not keen on bookmakers providing users with the ability to bet on their game, they may at some point have the legal ability to act. There are several publishers and developers who seem to have no issue with betting on their games and may understand that it could fuel the eSports scene. Often they only take action if they see direct harm heading their way
such as Valve did with CS:GO skin betting which is discussed in detail later. Many developers provide data for bookmakers to use, suggesting support for the betting. The ideal situation for both parties would likely be one where developers recognize the value of working together with bookmakers to fuel their eSports scene.

**eSports Integrity**

The eSports Integrity Coalition (ESIC) was formed in 2016 to ensure fair competition and regulation within eSports. Often integrity is overlooked in eSports. Ian Smith, the eSports Integrity Commissioner, when asked about the goals of ESIC responded "ESIC was founded as a response to a threat assessment that revealed the most significant threats to eSports are, in order of priority, cheating to win using software cheats, online attacks to slow or disable an opponent, match-fixing and doping" (Stubbs, 2017) The possibility of cheating is an issue in any sport which is why almost all traditional sports have similar agencies in place. The integrity of a sport is crucial to its success as if viewers don't view games as fair then they will likely not bother to view them. Although cheating and match-fixing could never be fully eliminated, it can be drastically reduced. There will always be people willing to cheat for a price. CS:GO often gets the most publicity for cheating and match-fixing being prevalent within the game. In 2014 a professional player named Hovik "KQLY" Tovmassian was banned from CS:GO for cheating within the game. At the time he was viewed as one of the top players in CS:GO. ESIC is trying to prevent cheats like this from taking place within the games by partnering with large organizations such as ESL and Dreamhack who run some of the biggest eSports tournaments worldwide.
Types of Betting on eSports and how do they work?

As mentioned previously there are five main types of bets; Outright, Match, Handicap, Accumulator, and Special.

**Outright** bets are a common type of bet that will be placed in eSports. Outright bets are found in pretty much every eSports event and tournament. Depending on the game being played, the bet will be placed on a player or team. The bet is being placed on the entirety of the tournament. As there will be many teams and players competing the odds will be quite high. It will be hard to find a match favorite with odds higher than 2/1 in a single match, but in a tournament, for an outright bet, it will be common to find odds around 6/1 for a tournament favorite. The other style of outright bet is having bets placed on statistics rather than overall game outcome, such as most kills within the tournament.

**Match Bets** are bets that are placed on a single one-on-one match. The bet is placed on the outcome of a single match. Depending on the game there are three options; Win, Lose, Draw. Match bets are the simplest form of eSports bets which is why they are the most common form of a bet being placed. Either Cash, Skins or Cryptocurrency can be used depending on the bookkeeper.

**Handicap Bets** are a way to get more value from a match with low odds. A handicap essentially places a minus handicap against the player that is the favorite to win whereas the player who is less likely to win gains a positive handicap. This means the player less likely to win gets a head start, and the favorite must play catch-up. Typically, the odds for both players will be around 1.9.
**Accumulator Bets** are often used if the better is struggling to get value from their bets. In its purest form, it is just as the name suggests, an accumulation of bets. Rather than waiting for merely one wager, you are waiting for multiple simultaneously. An accumulator is riskier, but those risks yield a greater reward. This is often where large sums of money are won. It's not rare to see people winning thousands from bets of $2-3.

**Special Bets** are the least common type of bet for eSports. They are available in more traditional sports, so it is likely they will become more commonplace in the eSports market. They are often referred to as a "Novelty bet" They offer odds on something that is very unlikely to happen within a tournament. For example, a common type of bet you will see placed on a traditional sport is a streaker appearing on the pitch. They are often bets placed just for a bit of harmless fun to make an event more interesting and with decent odds. (e-sports betting, 2017)

**Monetary eSports Betting**

As explained above there are five main types of eSports bets that can be placed. These are Outright, Match, Handicap, Accumulator and Special. Each of these has their place in the market, and many sites accommodate them. The current statistics are very impressive considering eSports is still "under the radar" to a certain extent. Although the fanbase of eSports is enormous, it still has a long way to go to reach the level of traditional sports. In recent years as eSports betting has become more popular, mainstream gambling sites have started to adopt it. In the past, if bets were placed on eSports games it would often be on an unknown website where you wouldn't know if
you could trust it or not. When choosing a site to use consumers must be careful. With the massive increase of eSports betting websites, some people wish to take advantage of this. There are many blogs and pages that compare different eSports betting portals and point out all their pros and cons so that the consumer can find the one that best suits their preferences. (gamblingsites.com, 2017) Betting on eSports with money rather than skins is almost identical to how you would bet on any other traditional sport. There are the same five main types of bets in eSports as other sports work in a very similar way. This increases the possibilities of future growth in eSports betting for example within casinos there could be live betting lounges where people could watch games being played live and place bets.

Skin Gambling

Skin Gambling is essentially "Online wagering conducted in digital items instead of money" (Grove, 2014) There are a few central questions then need to be answered to understand Skin Betting; What are skins? How do you get skins? How do people bet skins? This section will be looking at the market mainly from before the Valve crackdown.

What are Skins?

Skins are a virtual item that can be used within a game. They are purely cosmetic and do not affect the game itself. The most common game that uses skins and has a large market for Skin Gambling is Counter Strike : Global Offensive. Figure 7 shows a popular
and expensive skin for Counter Strike which replaces the regular single shade of green on this particular weapon.

(Figure 7)

How do you get skins?

Skins can be obtained in a few different ways:

- Received during gameplay
- Received as part of a promotion
- Received them from a crate (Which is paid for by the player)
- Traded with other players
- Purchased the skin on one of many marketplaces

How do people bet skins?

Each skin has a different currency value depending on its rarity and demand. Prices range from a couple of cents to thousands of dollars. The costs are determined by how much a customer is willing to spend as it is a consumer-run marketplace. Betting skins
should be seen as a casino chip each having their own value but not being cash. They allow bets to be placed on any gambling product. For instance, in addition to the five standard types of eSports betting mentioned earlier, these skins can now be used for traditional casino games instead such as Blackjack given they have a recognized currency value.

So How Large is the Market for Skin Betting?

Before the skin crackdown from Valve, it was estimated that $7.4 billion worth of skins would be bet worldwide in 2016. This in contrast to the $550 million that was estimated for cash bets for eSports in 2016.

There are a few major products in the skin betting market. These are; Sportsbook-style betting and Jackpot games which essentially act like lotteries where players will receive a ticket depending on the value of their skins. (Grove, 2014)

Of the $7.4 billion, 44.79% is. Sportsbook betting, 25% Jackpot bets, 13.95% Roulette Bets, and the last 9.88% is a mixture of many smaller games. (Slot machines, mystery boxes, blackjack, raffles, etc.) The diversity in the games that people can play is why skin gambling is much larger than eSports cash gambling. Although there were hundreds of sites that provided skin betting services (The majority being Jackpot style games) it is believed that only 15 made up the bulk of the $7.4 billion bet.

One of the major issues faced with Skin Gambling is the lack of regulation and transparency in site ownership. The market was left open to accusations of underage gambling as there was little in the way of user verification making it easy for users that were underage to partake in skin gambling. Although there is no concrete evidence to
support it, it is widely believed that a large percentage of the user base was not of legal age to gamble in their jurisdiction. (Grove, 2014)

The Legal Side of Skin Gambling

Skin Gambling and Betting exists in an area of the law that is very much a grey area. There are three primary statutes that could affect skin gambling; Unlawful Internet Gambling Act, Illegal Gambling Business Act, and The Wire Act. Although each of these acts is rather old now, each can be applicable in some form to Skin Gambling.

The Unlawful Internet Gambling Act makes it illegal for a business to receive payment from a user that does not reside in a state where gambling is legalized. "The Act prohibits gambling businesses from knowingly accepting payments in connection with the participation of another person in a bet or wager that involves the use of the Internet and that is unlawful under any federal or state law" (U.S.C, 2006)

Although the Illegal Gambling Business Act is not specific to the Internet, it does make it illegal for a person to take part in a gambling business that is considered illegal. It was put in place to fight organized crime but has since been used to fight online gambling. "Whoever conducts, finances, manages, supervises, directs, or owns all or part of an illegal gambling business shall be fined under this title or imprisoned not more than five years, or both." (U.S.C, 1955)

The Wire Act outlaws the use of telephones or other wire devices to transmit bets or wagers on Sporting Events. It does not apply to wagers placed on non-sporting events. (U.S.C, 1961)
There are no current cases involving skin gambling, but there are several cases against the social gaming industry that might give an insight into what the future could hold. Soto v. Sky Union is a case where the consumer sued the operator stating the virtual coins on the social gaming website had a monetary value thus the operators were guilty of violating the state and federal laws that prohibited online gambling. The court concluded the social gambling website was not involved in illegal gambling because the players were not betting real money. The prizes were just virtual tokens that were used for gameplay only and had no real-world value. There have been a couple of other cases that have been similar as well. These created a precedent wherein if there is a lack of real world money being bet and won; then there is no illegal gambling taking place under current laws.

As there have been no cases as of yet that have taken place involving skin gambling, it is speculated they will treat them similarly to social gaming cases and most likely dismissed. Although this is only one legal aspect of skin gambling, there are other issues that could be faced such as underage gambling which would follow different precedents. (Grove, 2014)

**Valve's Crackdown on Skin Gambling Summarized**

In June 2016 Valve became part of a lawsuit alleging that they "Knowingly allowed, supported and/or sponsored illegal gambling." This lawsuit caused Valve to take action against these Skin Gambling Websites to put an end to the lawsuits. The blame was forced onto Valve as they provided the Steam API that allowed the Skin Betting websites to make the trades of skins. Many of these websites did not have any form of age verification meaning it was highly likely that there was underage gambling taking
place. This was the crux of the lawsuit which was accusing Valve of complicity in this underage and illegal gambling.

On July 13th, 2016 Valve made an announcement on their website about their trading system and the use of these gambling websites. They stated at the end of this publication that "We are going to start sending notices to these sites requesting they cease operations through Steam, and further pursue the matter as necessary." In Valve's cease and desist letter sent on July 19th, 2016 they stated "Your commercial use of Steam accounts is unlicensed and in violation of the SSA. You should immediately cease and desist further use of your Steam accounts for any commercial purpose. If you fail to do this within ten (10) days Valve will pursue all available remedies including without limitation terminating your accounts."

The State of Washington Gambling Commission released a statement on October 5th 2016, saying it notified Valve that they must "Immediately stop allowing the transfer of virtual weapons known as ‘skins’ in online gambling activities contrary to state gambling laws" (State of Washington Gambling Commission, 2016) Stating that "Since February 2016 ‘Skins' continue to be used as consideration for illegal gambling activities on third party websites." (State of Washington Gambling Commission, 2016)

Valve responded stating "As we have explained on multiple occasions, Valve is not engaged in gambling or the promotion of gambling, and we do not ‘facilitate' gambling. The operation of Steam and CS:GO is lawful under Washington law" (Valve, 2016) Valve later argued that the only parts they play on the website is the sites use of their trading system which is there "for the entertainment of Steam customers." And that "Valve does not allow Steam customers to cash out skins or Steam Wallet fund for real
world money." Later they state again "None of these activities are illegal in Washington or any other jurisdiction, and we do not believe the Commission contends to the contrary."

Valve saw the commissions argument for cracking down on skin gambling as "Valve could stop this, so it should" and then stated "We do not want to turn off the Steam services, described above that skin gambling sites have taken advantage of" believing the services "have substantial benefits for Steam customers and Steam game-making partners." Valve in July, before this notice by the Washington Gambling Commission, sent out cease and desist notices to the owners of over 40 online skin betting services. Valve references this later in their letter saying "Valve has taken action itself against skin gambling" and at the end of the letter saying they "would be happy to cooperate with the Commission, if it is able to identify more skins gambling sites that are illegal" and then asking them to "clarify the legal allegations against Valve". (Valve, 2016)

**Skin Gambling Controversy**

There are often issues that arrive within communities when a game provides some form of in-game items that they can get through buying an in-game skin or chest with real money. At the time of writing this paper, there is controversy surrounding a recent game that quickly grew in popularity PlayerUnknown's Battlegrounds. In the recent patch notes dated 07-27-2017 the developers stated, "We're aware that many of you want new in-game skins to further customize your character." On August 3rd, we will be launching three new crates." The Gamescom Invitational Crate can be opened with a key which you can buy for $2.50 each" (Bluehole, 2017a) Many players were quickly vocal about this implementation viewing it as an early money grab. Some questions
arose from this referring to different models of crates that had been implemented in other games and whether PlayerUnknown's Battlegrounds would be similar. It was stated by the games lead developer "I believe the CSGO model for skins is a proven working model" It was hoped before this statement by a large number of the community that the crate system would be similar to that of Overwatch where players could receive crates through playing as well as paying. This made more members of the community believe the action was purely a cash grab and the comparison quickly arose between PlayerUnknown's Battlegrounds and a similar game H1Z1 which had a very similar model that the fans were very unhappy with. When viewing forums and community pages for PlayerUnknown's Battlegrounds the unhappy community members are very vocal whereas the members who are in support often stay quiet. The main argument for the support of skins in general that doesn't pop up often is simple. When initially creating a game, developers must hire certain types of team members; some will be artists, some software developers. Once the game has been created and released a substantial amount of the art work will have been completed, software developers will be continually needed to add improvements to the game, these enhancements often will not need additional art work. To justify keeping the artists they need a new role to play and creating cosmetic items is often an easy option that will provide a continued revenue stream for the company and provide work for these artists while the developers continue improvements. An argument that so often appears on community forums is "Why are the developers focusing on skins rather than the important bug fixes in the game" When realizing the majority of skin development is done by the art teams that argument quickly becomes invalid. The art teams are needed to be kept on board for future developments within the game, and the creation of skins also creates an influx of revenue so the game can continue to be developed. Just before the release of the new crates and skins the developers released a statement "While our intention was and still
is to add the full feature to the game when we move into actual release, we do need to test it prior to launch and at Early Access so that it is stable and ready to be fully introduced to our community. The idea of testing, before full implementation, is at the heart of adding every new game feature in our game, and this includes the crate and key system which we believe will serve as the foundation of a healthy economy after launch. This is an economy that would and should benefit all players - both who are willing to pay and who are not willing to pay for vanity items. " (Bluehole, 2017b) Although it is not yet clear about the route this game will take, it is thought the developers will continue their current path despite the community's objections, and many believe they might allow forms of skin gambling in the future.

The Future of Skins

Currently, the future is unclear. There are a few different ways games have introduced skins. The method that Overwatch has used for skins is the community preferred method as the player who doesn't pay for crates that contain skins have an equal chance of getting a rare skin as players who pays for crates, they instead just get a smaller volume of crates. Compared to the CS:GO model for skins which is where you obtain crates in the game and can also purchase them on the marketplace and then must pay to open those crates. Later each of the skins can be bought and sold on the market as well giving them a monetary value, whereas, in Overwatch, skins have no monetary value.

Conclusion on Skin Betting
Skin betting and gambling can be a very controversial topic in many gaming communities. Many people are opposed to it as they feel it distracts developers from other important aspects of the game, whereas others are in favor for it as having items that developers can earn a constant stream of money from means a longer life for the game. Since the Valve restrictions, the market for skin gambling has gone down drastically, but it is still an essential part of the eSports betting scene. Much of the future for betting on eSports is unclear right now, and a large part of it will depend on how strict Valve are on their new rules and regulations. It will be dependent on Valves restrictions until a later point in time when there is a different trading platform for skins is developed other than Steam. A new platform would be controlled by another company who will be able to set their own rules. Skin betting has its ups and downs mainly focused on the legal aspects. Currently, as there are no cases against any form of skin gambling there is no precedent set so we must search for cases that are as close to skin gambling as possible, but that also leaves many grey areas in people's minds.

eSports in Casinos

On November 17th, 2016 The Downtown Grand Hotel & Casino, after months of unsuccessful attempts, received permission to take wagers for eSports matches. The Grand was the first casino to do so legally. (Alambeigi, 2016) The Chairman of Downtown Grand Las Vegas said "It's undeniable that the landscape of gaming is changing, along with every other industry because of advanced technology and consumer behaviour" "I feel it is my duty to my company and its investors to keep Nevada relevant by changing with the times and coming up with new ways to make the gambling experience more compelling" (Task, 2016) The dedicated space for video games is believed to be the first within a casino and is situated right in the middle of the
casino floor. This eSports lounge was previously used for high-limit gaming. The lounge was made with 5v5 teams in mind for competitions and tournaments. Each Friday the casino runs tournaments where contestants pay around $15 to compete against others in popular games for cash prizes. Often there will be around 50 contestants with even more spectators. Schorr commented on the atmosphere "What's great is that we're finding that something like this really fits quite naturally in the casino atmosphere" they aim to create an authentic eSports destination. Other than their regular tournaments they also host events such as the 2016 Madden Community Championship and regular eSports viewing parties. Schorr sees the addition of an eSports lounge similar to a casino adding a nightclub, they don't detract from the casino itself but in fact, add a new dimension which draws in new customers. Schorr doesn't doubt other casinos will shortly follow what the Downtown Grand is doing but believe they will always be relevant because of their location. Other locations are looking at other opportunities to explore as well such as accepting wagers on eSports in their sports books, hosting live events, on-site eSports arenas along with eSports gaming stations.

UMG Media Corp

A great example of other casinos looking to take advantage of eSports is the Tropicana and The Palms in Las Vegas. These two hotels and casinos are partnering with UMG to bring eSports into casinos for live events and betting. UMG is one of the top eSports companies within the US offering live gaming events and online events as well. UMG has hosted over 13 million online games and has held events in major cities such as Orlando, Washington and more. (Market Wired, 2017)
Nevada "eSports" Bill

On May 27th, 2017 Nevada Gov. Brian Sandoval signed a bill ("The Nevada eSports Bill") that made pari-mutuel bets legal for eSports events. This legislation went into effect on July 1st, 2017. (Zalik, 2017)

The Bill

The legislation is part of the Senate Bill No.240 (Counsel, Commission & Comm, 2017). The important change made to the bill is the inclusion of "sporting events or other events" and various other versions of this wording. This clarifies that the pari-mutuel system may be used for bets on events other than the original horse racing, dog racing, and sporting events. (Dickinson Wright, 2017) eSports is included in the bill under the category "other events." The word eSports is never mentioned within the bill but under other events, "competitive gaming" is included. AG Burnett, Chairman of the Gaming Control Board, said "Ideally, you would have people coming from all over the globe to compete, with people playing to come in and bet on that event like you would a sports book" (Zalik, 2017)

Pari-Mutual Betting

Pari-mutual Betting is often referred to as pool betting. Most of the time when bets are wagered against a bookmaker. In pari- mutual betting you are wager against other betters who have placed bets in the same event. Each bet enters a pool and then when the event is over the pool is shared out among the winners. The house then takes an overall share of the total pool. In the past, pari-mutual bets have been strongly
associated with horse and dog racing. The pay-out depends on two factors: how many people placed a bet on the event and how many of those people choose the correct winner. The pay-out is officially calculated once the betting has closed. Pari-mutual betting is popular both among professional and recreational gamblers. It is also the most widely available form of gambling around the globe as it is the only form of legal gambling that people many people have access to in countries with stricter gambling laws. (gamblingsites.com, 2017)

Nevada eSports

Las Vegas is the home of gambling and betting. It has also seen the rise of eSports in recent years. As mentioned in the section above, The Downtown Grand has an eSports lounge where they host events and also offered wagering on eSports events. Senate Bill 240 brings Las Vegas closer to becoming the major eSports hub.

What this means for eSports Betting

Right now, it is unclear as to how this bill could affect eSports betting overall. Many people have a split view on the bill. After speaking to Ian Smith, who is the Integrity Commissioner at eSports Integrity Coalition (ESIC), my initial feelings for the bill were nullified. Ian feels pari-mutual betting will only have a very small share of the total wagers placed on eSports. We both agreed that it was a good start having a bill like this for eSports, but Ian argued after eSports betting got the go-ahead from state regulators in November 2016, this bill essentially changed nothing other than bringing a little more awareness to eSports.
Conclusion

The eSports gambling market is seeing a large rise in popularity with viewers and gamers. eSports as a whole is a large growth industry and only seems to be accelerating. With eSports betting attached to the growth of eSports and eSports viewing we can expect similar growth. Although the skin gambling market has plummeted after Valve's restrictions, other aspects of the market are on the rise. It's unclear how heavily Valve will enforce their restrictions in the future, and this variable will affect the skin market. There are still many areas we will likely see a change in the future and are hard to predict. The legal side of eSports betting will almost certainly see changes soon. The Nevada eSports bill is a strong indication of this. There will probably always be some form of controversy surrounding the industry as there is with the majority of the gambling industry. The move of eSports betting to casinos is starting to take place as evident by The Downtown Grand, and the Nevada eSports Bill.
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