Journal of Applied Sport Management

Volume 10 | Issue 1 Article 8

1-1-2018

eSports Venues: A New Sport Business Opportunity

Seth E. Jenny

Margaret C. Keiper

Blake J. Taylor

Dylan P. Williams

Joey Gawrysiak

See next page for additional authors

Recommended Citation

Jenny, Seth E.; Keiper, Margaret C.; Taylor, Blake J.; Williams, Dylan P.; Gawrysiak, Joey; Manning, R. Douglas; and Tutka, Patrick M. (2018) "eSports Venues: A New Sport Business Opportunity," *Journal of Applied Sport Management*: Vol. 10 : Iss. 1.
https://doi.org/10.18666/JASM-2018-V10-I1-8469
Available at: https://trace.tennessee.edu/jasm/vol10/iss1/8

eSports Venues: A New Sport Business Opportunity

Authors

Seth E. Jenny, Margaret C. Keiper, Blake J. Taylor, Dylan P. Williams, Joey Gawrysiak, R. Douglas Manning, and Patrick M. Tutka

Journal of Applied Sport Management Vol. 10, No. 1, Spring 2018
https://doi.org/10.18666/JASM-2018-V10-I1-8469

eSports Venues

A New Sport Business Opportunity

Seth E. Jenny
Margaret C. Keiper
Blake J. Taylor
Dylan P. Williams
Joey Gawrysiak
R. Douglas Manning
Patrick M. Tutka

Abstract

Typically played via the Internet, eSports (organized competitive video gaming) is becoming a global phenomenon. The popularity of video games and the desire to spectate online and in-person gaming has amplified as Internet-based gaming has improved. eSports competitions are hosted all around the world, but particularly in the United States, Europe, and Asia. While eSports-specific venues are increasingly being built, many venues that host eSports competitions were constructed primarily for other professional sports or entertainment. These entertainment facilities must attract popular financially beneficial events in order to survive. eSports events have great potential to fit this mold. This paper briefly describes the development of eSports as well as discusses the current trends in eSports spectator consumption. Moreover, current and future eSports venues are described, highlighting potential licensing, equipment, and personnel requirements needed for hosting eSports events. Open systems theory is utilized to capture and explain the draw of hosting eSports events and how facilities must adapt to their changing environment.

Keywords: *e-Sports, video gaming, electronic sports, sport venues, facilities*

Seth E. Jenny is a professor in the Department of Public Health and Social Work at Slippery Rock University of Pennsylvania.

Margaret C. Keiper is an assistant professor in the School of Management at the University of Alaska-Fairbanks.

Blake J. Taylor is an instructor in the Department of Physical Education, Sport & Human Performance at Winthrop University.

Dylan P. Williams is an assistant professor in the Department of Kinesiology at the University of Alabama.

Joey Gawrysiak is the chair of the Management Science Division, Harry F. Byrd, Jr. School of Business at Shenandoah University.

R. Douglas Manning is the dean of Kinesiology and Athletics at Santa Ana College.

Patrick M. Tutka is an assistant professor of Sport Management at Niagara University.

Please send correspondence to dr.sethjenny@gmail.com

Introduction

eSports, or electronic sports, are organized video game competitions and this enterprise has become a world-wide sensation (Jenny, Manning, Keiper, & Olrich, 2016). In 2014, 205 million people watched or played eSports (Casselman, 2015). However, eSports did not always have the popularity it is now receiving. As Internet-based gaming improved, so did the popularity of video games and the desire to spectate gaming online and in person. For example, the 2016 *League of Legends (LoL)* World Championship—the most popular eSports tournament—attracted 21,000 live spectators, was broadcasted by over 23 entities in 18 languages, and garnered 47.7 million unique viewers with a peak concurrent viewership of 14.7 million people (Kresse, 2016a). Moreover, eSports attracts over $500 million in sponsorships annually, including heavyweights Coca-Cola, Red Bull, Intel, and Nissan (Casselman, 2015). Furthermore, beyond collegiate club sports, 42 U.S. colleges and universities are members of the National Association of Collegiate eSports (NACE, 2017) which recognize "varsity" eSports teams—many of whom are supported by the athletic department and offer scholarships for these "student-athletes."

eSports fit into the model of "nontraditional" sports along with other activities that utilize technology to remove the participant from direct action (e.g., Drone Racing League), that are on the rise in popularity, and offer a contrast to traditional sports (e.g., baseball, football, basketball, etc.) (Gawrysiak, 2016). Similar to the differing types of traditional sports, there are varying genres of eSports games, including first-person shooter (FPS), multiple online battle arena (MOBA), fighting, real-time strategy, and sport video games. Video games such as *Star Craft 2, Counter-Strike: Global Offensive, Defense of the Ancients (DOTA) 2*, and *LoL* are the most popular games within eSports (Moth, 2014).

With the help of ESPN and other broadcasting companies, along with Internet streaming, the viewership in eSports is comparable to many traditional sports (Grubb, 2015). Aside from online streaming, millions of fans attend professional eSports competitions in varying venues (Keiper, Manning, Jenny, Olrich, & Croft, 2017). These events involve eSports players arranged center stage in front of desktop computer stations where the action is broadcast live via massive stadium screens (e.g., Jumbotron) within the venue. eSports competitions are hosted all around the globe, but primarily in large United States (U.S.) cities, Western Europe, China, and South Korea. Many venues that host eSports were constructed primarily for other professional sports or entertainment, but new venues have or are currently being built specifically for eSports (e.g., Esports Arena, 2017b; Millennial Esports Arena, Akers, 2017).

The purpose of this paper is to apply open systems theory to capture and explain how facilities are adapting or being created to attract eSports events. This paper provides a brief overview of the developing popularity of eSports, highlighting the revenue possibilities and sport spectator consumption regarding hosting

eSports events. Moreover, current and future eSports venues will be presented, while briefly discussing the necessary licensing, equipment, and personnel needs for hosting eSports.

Open Systems Theory

In its most basic form, a sports facility is an organization that must have a plan to sustain long-term growth. For an organization to survive long-term in an ever-increasing competitive atmosphere, consideration must be given to the environment the organization constantly interacts within (Amagoh, 2008). The indication that the external environment has an influence on organizational success or survival is aligned with simple open systems theory. Open systems theory purports that organizations are strongly influenced by the environment in which they operate (Bastedo, 2004). Some of the general environmental factors a sports facility frequently interacts with include economic, political, and social factors that influence the ability of the sports facility to reach its goals. The goal of most facility managers surrounds the concept of attracting events that consumers will attend, resulting in revenue for the venue. A major environmental factor that has emerged in the sporting/entertainment realm that is satisfying the goal of attracting consumers to a sporting facility is the surge in popularity of eSports and eSports competitions.

eSports events appear to carry major financial and economic impacts, which are key mechanisms for long-term facility success. According to Gaudiosi (2016), the 112 major eSports events in 2015 generated $20.6 million in ticket revenue. Further, the Staples Center in Los Angeles, California, sold all available spectator seating in 2013 and 2016 for the *LoL* World Championships (Howell, 2016; Tassi, 2013). Keep in mind, the Staples Center is a multipurpose arena and is the home of the National Basketball League's (NBA) Lakers and Clippers, the National Hockey League's (NHL) Kings, and Women National Basketball League's (WNBA) Sparks. These pro sports franchises are merely tenants of the facility, meaning the Staples Center must also attract a multitude of other events, such as concerts and award shows (e.g., the Grammy Awards), to fill the venue. eSports competitions are an example of these types of income-generating tertiary events.

Thus, the growth of eSports has led to the emphasis on attracting eSports to existing venues as well as the creation of venues specifically to host eSports events—both of which are responses to the external environment in which an organization operates. As such, open systems theory appropriately underpins this analysis. However, in order to apply open systems theory and explain the changes needed within a facility to adapt to hosting eSports events, an understanding of the historical, social, and economic power behind eSports is needed.

eSports Spectator Consumption

By the early 2000s, Internet speeds became faster and video games looked more realistic, responded quicker, and involved more strategy. These advancements

extended the gap between the skilled and competitive gamer from the recreational novice, while novice video gamers' desire to watch elite video gamers perform surged. Today, global eSports awareness has reached 1.3 billion people (up 15% from 2016), including 191 million eSports "enthusiasts" and 194 million "occasional viewers" (Newzoo, 2017). Moreover, according to the Entertainment Software Association (ESA, 2016), at least one person plays video games at least three hours or more per week in 63% of U.S. households, with the average gamer being 35 years old (41% female). Therefore, the industry of video gaming has become a global multibillion-dollar industry. From 2006 to 2015, U.S retail sales of video and computer games increased from $7.3 to $16.5 billion (ESA, 2016). As consumers spend, event management and marketing opportunities thrive.

In 2016, 424 worldwide eSports events were held with prize purses greater than $5,000, where combined prize purses totaled $93.3 million—over a 50% increase from 2015 (Newzoo, 2017). The largest eSports tournament prize purse is found at *The International* (Valve Corporation, 2016), which lists the current prize pool at $20.7 million. With the continued rise in prize purses, Sallomi and Lee (2016) predicted eSports will reach $1.2 billion in revenue in 2018. As such, sponsors have taken notice and have begun to invest millions of dollars in sponsoring eSports teams, events, and tournaments often held at non-eSports-specific venues. For instance, Hyundai, Gillette, 5-Hour Energy, and Dell have all partnered with differing eSports tournaments, leagues, or teams in order to gain footing in the eSports industry (ENPE Media, 2016).

As introduced earlier in this paper, in open systems theory, an organization's responsiveness to environmental change becomes vital for success (Homburg, Grozdanovic, & Klarmann, 2007). One of the key groups within an organization's environment that can influence the need for organizational change are consumers (White, Varadarajan, & Dacin, 2003). In the sports event and facility world, the value of consumers or spectators is clear. Spectators are what drives revenue for a facility. Conclusively, sports facilities look to attract events that have the capabilities to attract a large number of spectators, hence the appeal of eSports.

Watching eSports has become a stronger phenomenon than playing the games themselves (Hamari & Sjöblom, 2017; Shaw, 2013). Newzoo (2017) revealed that 42% of eSports viewers (most commonly streamed through the Internet) do not actually play the game they watch. These spectators may only watch because they may not have the same skills necessary to compete at such a high level, but appreciate watching such talented players. This rationale highlights how eSports spectatorship has moved beyond just video game players and shares similarities with other sporting events like the Super Bowl or World Cup where many spectators watch, but do not regularly play American football or soccer, respectively.

Karakus (2015) noted over 250,000 people streamed online *LoL* regular season matches worldwide and over 27 million people watched the *LoL* finals—9 million more than the 18 million viewers of the 2014 NBA finals. Moreover, 14% of North

Americans aged 21 to 35 years watch eSports at least once a month, while 18% of this group watch this amount of ice hockey—a comparable statistic (Newzoo, 2017). Headset microphones give eSports players the ability to communicate with one another as the spectators listen, allowing fans to easily hear mid-game player comments similar to NASCAR drivers and pit crews during races (Hamari & Sjöblom, 2017). Twitch (2017), YouTube Gaming (2017), and Ustream (IBM, 2017) are commonly used live and recorded eSports online streaming platforms.

eSports is also shown on television with live commentating similar to traditional sports. For example, Turner Sports broadcasts *ELeague*, a professional *Counter Strike: Global Offensive* league featuring 24 teams from across the world on TBS (Putterman, 2016). *ELeague* has achieved solid ratings, averaging 271,000 viewers across live and time-shifted viewing. However, spectators attending live eSports events are becoming more common. Lee and Schoenstedt (2011) noted while traditional sport fandom may involve spectatorship at live events, the culture of eSports consumption appears to primarily be an online endeavor. However, the opportunity to explore live eSports events in sports stadia appears to be gaining traction.

While there is little empirical data on why eSports fans would consider watching eSports at a live event rather than via the Internet, there have been studies investigating the motivations of consuming eSports compared to traditional sports (e.g., Hamilton, Garretson, & Kerne, 2014; Karakus, 2015). Data shows that social interaction is one of the main contributors to eSport consumption (Brenda, 2017; Hamari & Sjöblom, 2017). Watching a live eSports event also gives the fan a means of escape from reality, the drama of a sporting event, and the realized fantasy of seeing their favorite players up close. Moreover, similar to National Football League (NFL) fans wearing the uniform of their favorite player, many eSports fans arrive at events dressed up as their favorite video game character—coined "cosplay" (i.e., costume play). While these characteristics are similar to traditional sports, eSports may be unique due to their often intimate venues, technological access to interact with others through live chatting and message boards, and often fan organized cosplayer showcases (Brenda, 2017).

"Vicarious achievement, acquisition of knowledge, aesthetics, social interaction, drama/excitement, escape (relaxing), family, physical attractiveness of participants, and quality of physical skill of the participant" (Trail, Anderson, & Fink, 2000, p. 157) are common motives for sport consumption based on social and psychological needs. Other factors that may affect fans' motivations to consume sport in person include gender, sport, stadium, and host of other influences related to budget, time, and/or personal interests (Wann, 1995; Wann, Grieve, Zapalac, & Pease, 2008). Clearly, fans may have different motivations for consuming sport in-person.

While traditional sports still depend on ticket revenue, multibillion-dollar media contracts have diminished the consequence of sold-out stadiums as the

sole-source of revenue generation (PWC, 2011). Conversely, eSports began as an Internet phenomenon and has morphed into in-person mega events, while maintaining its presence through a variety of online channels. In-person attendance at all sporting events is not tied to winning/losing, but instead, stadiums as attractions and a "compelling entertainment experience" (Mullin, Hardy, & Sutton, 2014, p. 466)—particularly for younger generations who seek participatory experiences as opposed to passive viewership.

Hosting eSports

eSports stadium attendance has seen substantial growth over the last few years. For example, 173,000 people attended a two-weekend tournament in Poland in 2016, up from 113,000 in 2015 (Elder, 2017). In 2015, seven venues had crowds over 13,000 for a single eSports event, with five having over 20,000 (Kresse, 2016b). Certainly, these types of attendance figures have encouraged more venue managers to have interest in hosting eSports events. However, the challenge for many non-eSport-specific venues is providing the necessary infrastructure to make eSports work (Hill, 2013). Fortunately, much of the needed technology requirements needed to host eSports events are already included at major venues due to pressure from traditional sports teams and other organizations that the venue hosts (Maddox, 2016). The modern stadium provides many amenities that fans find attractive, from the beauty of the stadium itself, to comfort, access, scoreboard quality, and the ease of the layout (Tutka, 2016). Several venues that solely host eSports events already exist.

The following sections introduce three approaches or areas that sports venues can respond, or have responded, to the changing event environment. Equipment and personnel needed to host eSports events, adapting existing facilities, and creating new eSport-specific facilities are all covered. All three topics covered are various ways organizations have responded to the external environment within sports events and facilities that now includes eSports.

eSport Venue Equipment and Personnel

Attracting eSports events cannot be done without considering the specific needs to host an eSports event, which again draws on open systems theory. The venue must respond to the environment in terms of specific equipment, technological and personnel needs to host an eSports event. Though similarities exist, the requirements for eSports events vary from other events such as traditional sports events and concerts.

The equipment needed on the competition site for eSports are similar to those of basketball as the two activities are played in similar size arenas with comparable seating and lighting requirements (Howell, 2016; Tassi, 2013). However, eSports require particular equipment that differentiates itself such as computers/gaming consoles for each participant, cables to connect all devices through a Local Area Connection (LAN) to reduce lag time, headsets and gaming chairs for the

participants, and large-scale monitors for the audience to see the in-game action. The type of video game played within the event will not only determine whether computers or gaming consoles are needed, but will also define the peripheral equipment—such as gaming mice, controllers, and computer monitors. Depending on tournament rules, some professional gamers may bring their own equipment which must first be inspected by tournament organizers to check for any special modifications that may give that gamer a particular advantage. The proper equipment is further contingent upon the type, size, and location of the event.

Similarly, the personnel needed to host eSports events parallels traditional sporting events. Both event types need ushers, concession staff, custodians, security, and ticket takers, but quantity differs based upon the size of the event and arena. However, there are many unique positions needed, including technical staff for any technology snafus as well as event/game managers who act as quasi-referees and settle any rules disputes.

In addition, eSports event hosts act as main orators in order to address the crowd, introduce teams, and present awards. This person also works with the event/game manager to keep the event running smoothly. In some smaller live events, this person may also assist as a broadcaster. Broadcasters are often referred to as "shoutcasters" or "casters" and provide commentary for the viewing audience. Much like in traditional sports, broadcasters are often former players of the game played at the event and possess the experience required to be able to relay the action to the audience. Casters serve an important role in all eSports competitions as they are the ones that the audience relies on for game information and interpretation.

Adapting Existing Venues to Host eSports

Many venues that host eSports were constructed primarily for traditional sports or entertainment events. For example, the Richmond Raceway is set to host a 64-person NASCAR Heat 2 eSports tournament within their amphitheater prior to the 2017 Federated Auto Parts 400 race (Richmond Raceway, 2017). Moreover, the Durham Bulls Athletic Park will become the first Minor League Baseball venue to host an eSports competition when it hosts the inaugural DBAP Gaming Challenge in the fall of 2017 (Durham Bulls, 2017). According to event organizers, the three-day event will charge single and package spectator ticket options, operate concessions throughout, and will utilize the PNC Triangle Club, party decks, dugout tops, and the 63 by 25 feet Blue Monster videoboard within the facility (Durham Bulls, 2017).

Many of these venues have been arenas, which support easy transition from sporting events to eSports (Cano, 2017; Nino De Guzman, 2015). In concert with open systems theory, these venues adapt to the needs of the community at large and transition into venues that support concerts, conventions, and eSports (Bastedo, 2004). Table 1 provides a sample of venues that have made the transition to host eSports.

Table 1

Sample Venues that Have Hosted eSports

Venue Name	Location	Seating Capacity	Size	Sample eSports Tournament(s) Hosted
Air Canada Centre	Toronto, Canada	19,800	665,000 sf	• LoL North America Finals (2016)
Bill Graham Civic Auditorium	San Francisco, CA	6,000	31,140 sf	• LoL World Championships Group Stage (2016)
Chicago Theatre	Chicago, IL	3,533	4,500 sf	• LoL World Quarterfinals (2016)
Commerzbank Arena	Frankfurt, Germany	55,000	429,480 sf	• ESL One Frankfurt Dota 2 Tournament (2016)
Copper Box Arena	London, UK	4,000-6,500	25,833 sf	• Gfinity G3 (2014)
Key Arena	Seattle, WA	17,072	400,000 sf	• International Dota 2 Tournament (2014 – 2015)
Lanxess Arena	Cologne, Germany	20,000	86,111 sf	• ESL One Cologne - Counter Strike (2014 – 2017)
Madison Square Garden	Manhattan, NY	19,830	20,976 sf	• LoL North American Finals (2015) • ESL One New York-Dota 2 Championship (2015) • LoL World Championship Semi-Finals (2016)
Mandalay Bay Events Center	Las Vegas, NV	12,000	70,333 sf	• LoL North America Championship Series (2016)
Rotterdam Ahoy	Rotterdam, Netherlands	15,000 (arena) 40,000 (complex)	581,251 sf	• LoL EU Spring Finals (2016)
Royal Opera House	London, UK	2,268	11,346 sf	• Call of Duty European Championships (2015)
Sang-am World Cup Stadium	Seoul, South Korea	45,000	155,674 sf	• LoL World Championship Finals (2014)
SAP Center	San Jose, CA	19,190	450,000 sf	• Intel Extreme Masters Tournament (2015)
Staples Center	Los Angeles, CA	20,000	950,000 sf	• LoL World Championship Finals (2013, 2016)
Wembley Arena	London, UK	12,500	56,000 sf	• EU League of Legends LCS Championship (2014) • eSports Championship Series (2016)

Note. sf = square feet; LoL = League of Legends.

Recently, some publicly financed sports stadiums have come under scrutiny with taxpayers sometimes feeling the brunt of financial loss if these facilities do not generate enough revenue within the community (Dorfman, 2015). With some venues losing money annually, adding eSports to their event inventory may assist with revenue generation. As previously noted, the Staples Center was one of the first American venues to invest in significant infrastructure improvements to host the eSports 2013 *LoL* final, which sold out in one hour (Tassi, 2013). Other venues have followed suit with Madison Square Garden, Key Arena, and the SAP Center all improving their capabilities to better host eSports events (Gaudiosi, 2015; Henry, 2016; Nino De Guzman, 2015).

While many venues have renovated to host eSports events, Sacramento's new Golden 1 Center was built to host eSports as one of its major components (Gatto & Patrick, 2016). It includes 650 miles of fiber optic cable and 300 miles of copper in its infrastructure to support continuous technological improvement (Pierce, 2016). The facility will also house a 6,000-square-foot data center to allow the use of technology to transform the building into whatever is needed from a technology standpoint (Pierce, 2016). When the facility was designed, the goal of the venue was to host events that needed large bandwidth such as drone racing and eSports. The Golden 1 Center is an innovation of the open systems theory model of sport facilities, showcasing its adaptability to future needs. However, certain eSports events can only be hosted in venues of adequate size.

The capacity of each venue varies depending mainly on the location and type of event hosted. For example, the 2014 LoL Finals were held at the Seoul World Cup Stadium in Seoul, South Korea, which boasts a seating capacity of 45,000. However, smaller gaming tournaments like *NBA 2k17: Road to the Finals* was held in Orange County, California, at the eSports Arena with only a fraction of the seating capacity and popularity.

Moreover, in order to host an eSports event, regardless of size, a tournament and/or broadcast license from the game's publisher is needed. In many cases, small community events are covered under a community tournament license as long as they are below certain thresholds and may not require formal licenses from publishers. For example, Blizzard Entertainment (2017) established criteria such as prize pools below $10,000 for a single event, not charging for online streaming and not broadcasting on television, amongst others, that allow smaller event organizers to put on the competition easily. Larger organizers that do not fit Blizzard's outlined criteria would have to apply for a formal license instead of using the Community Competition License.

eSports-Specific Venues

The final approach to responding to the environmental change in the form of the growth of eSports comes with a more all-embracing response. Cities or private entities are building venues that are primarily used for eSports. This too is an example of an organization responding to the environment in which they operate.

eSports stadium attendance has seen substantial growth over the last few years. For example, 173,000 people attended a two-weekend tournament in Poland in 2016, up from 113,000 in 2015 (Elder, 2017). In 2015, seven venues had crowds over 13,000 for a single eSports event, with five having over 20,000 (Kresse, 2016b). Certainly, these types of attendance figures have encouraged more venue managers to have interest in hosting eSports events. However, the challenge for many non-eSport-specific venues is providing the necessary infrastructure to make eSports work (Hill, 2013). Fortunately, much of the needed technology requirements needed to host eSports events are already included at major venues due to pressure from traditional sports teams and other organizations that the venue hosts (Maddox, 2016). The modern stadium provides many amenities that fans find attractive, from the beauty of the stadium itself, to comfort, access, scoreboard quality, and the ease of the layout (Tutka, 2016). Several venues that solely host eSports events already exist.

eSports venues are located in cities all around the globe but are primarily in larger U.S. cities, Western Europe, China, and South Korea. Table 2 provides several venues built specifically for eSports located in the U.S. (three in California), United Kingdom, and South Korea. These arenas are usually smaller in size and seating capacity compared to traditional sporting venues (Brinkley, 2016; Cano, 2017). However, these venues allow for easy broadcasting and facility usage for eSports, albeit significantly smaller live attendance (Karakus, 2015). Due to being focused on gaming, eSports-specific venues are designed with a large center-stage with desktop computer stations for gamers to access and for organizations to build out specific designs for their specific game (Cano, 2017). These venues also have significant broadcast capabilities, with several million spectators often tuning in online (Karakus, 2015; Kresse, 2016b).

Moreover, sample future eSports-specific venues currently being constructed include the 16,000-square-foot "Esports Arena" in Oakland, CA (Brinkley, 2016), the 200-spectator, 15,000-square-foot "Millennial Esports" arena in Las Vegas, NV (Akers, 2017; Cano, 2017), the multi-level, 30,000-square-foot "Esports Arena" in Las Vegas, NV (Esports Arena, 2017b), a 14,000-square-foot eSports arena within the new Golden 1 Center (home to the NBA's Sacramento Kings) in Sacramento, CA (Gatto & Patrick, 2016), and the 15,000-seat Major League Gaming (MLG) Arena in Hengqin Island, China (Makuch, 2014). Additionally, Esports Arena (2017a) has announced the first North American mobile eSports broadcast truck under production which purportedly provides "an engaging Arena atmosphere anywhere in North America" (para. 1). These developments show significant investment in facilities engaged in eSports specifically, but many multi-purpose arenas are now hosting eSports too.

Table 2

Sample eSports-Specific Venues

Venue Name	Location	Seating Capacity	Size	Sample eSports Tournament(s) Hosted
Blizzard Arena	Los Angeles, CA	450	50,000 sf	• Overwatch Contenders Playoffs (2017) • Hearthstone's Summer Championship (2017)
Blizzard eStadium	Taipei, Taiwan	250	17,500 sf	• Overwatch Pacific Championship (2017)
ELEAGUE Arena	Atlanta, GA	300	10,000 sf	• Counter-Strike: Global Offensive (2016 season)
Esports Arena	Santa Ana, CA	1,000	15,000 sf	• Call of Duty (2015 - Present) • Hearthstone (2015 - Present) • Dota 2 (2015 - Present) • LoL (2015 - Present) • Counter Strike: Global Offensive (2015 - Present) • Starcraft II (2015 - Present) • Daily Custom Tournaments (2015 - Present)
GameSync Gaming Center	San Diego, CA	100	6,000 sf	• LoL (2015-Present) • Minecraft (2015-Present) • CounterStrike (2015-Present) • World of Warcraft (2015-Present)
Gfinity Arena	Fulham, London, UK	600	12,000 sf	• Call of Duty World League (2017)
Microsoft Mixer NYC Studio	New York City, NY	n/a	n/a	• Madden 18 Launch Event (2017) • Gears of War 4 Tournament (2017)
MLG.tv Columbus Arena	Columbus, OH	500	14,000 sf	• MLG Counter-Strike: Global Offense Major Championship (2016)
Nexon E-Sports Stadium	Seoul, South Korea	500	6,000 sf	• EA Sports FIFA ONLINE3 adidas Championship (2016) • KartRider League DUAL RACE (2016) • Street Fighter V Crash (2016)
UCI eSports Arena	University of California, Irvine	80 gaming stations	3,500 sf	• n/a
Ultimate "Weapons Grade" Studio	Huntington Beach, CA	300	20,000 sf	• Professional eSports Training Camp Facility (e.g., eUnited, Gale Force Esports, GankStars Esports) (2017) • Activision Blizzard eUnited "Call of Duty" Training Broadcast (2017)
Yongsan eSports Stadium	Seoul, South Korea	1,000	9,000 sf	• ONGameNet (2016- present)

Note. sf = square feet; n/a = information not available; LoL = League of Legends.

Future Research

As with any new and emerging industry, the eSports ecosystem does have its own set of unique problems, especially from the event management and facility perspective. Historically, there has been a lack of standardization in the industry which could prevent players and teams from knowing which tournaments are real and which are scams (Irwin, 2016). This issue is becoming less concerning as leaders have emerged (e.g., Electronic Sports League, ELeague, Activision-Blizzard, etc.), where governing bodies have helped regulate the industry with standardized tournaments, schedules, rules, media deals, etc. However, future studies might explore the current state of this phenomenon.

Moreover, eSports will always involve ever-changing technology as new games, software, and hardware advance (e.g., virtual reality eSports). This presents an issue for eSports event venues as they must adapt to technological upgrades. Investigating eSports developments and market demands will always be a fertile area for future research. In addition, much like how the base of sport management literature has been grounded in business theory, there is a need for future research to empirically investigate eSports through a sport management lens. Regarding eSports venues, this might include studies on the motivations of why spectators attend live eSports events or why eSports players (both professional and recreational) participate at certain eSports competitions. Finally, future studies might explore the challenges and effective strategies of eSports event managers (e.g., facility design, marketing, sales, safety, cybersecurity, sponsorship, legal issues, concurrent and post-production event video streaming, etc.).

Conclusion

eSports is a steadily growing community and business while hosting eSports events continues to provide great promise for generating revenue. As evidenced throughout this analysis, eSports appears to be navigating a major social and economic change within the sporting industry, impacting facility and events management. The best remedy may be for marketers and other stakeholders to take time and learn the eSports industry (Irwin, 2016). eSports researchers and experts should be sought after for outside companies to gain the insight needed to manage successful eSports events and develop quality venues. In line with open systems theory, facility managers should adapt to the changing environment through investigating the local eSports market, or risk missing out on an excellent avenue for growth potential.

References

Akers, M. (2017, February 22). E-sports enthusiasts get boost with Neonopolis arena. *Las Vegas Sun.* Retrieved from https://lasvegassun.com/news/2017/feb/22/millennial-esports-arena-set-to-open-in-neonopolis

Amagoh, F. (2008). Perspectives on organizational change: Systems and complexity theories. *The Innovation Journal: The public sector innovation journal, 13*(3), 1–14.

Bastedo, M. N. (2004). Open systems theory. *The SAGE Encyclopedia of Educational Leadership and Administration.* Retrieved from http://www-personal.umich.edu/~bastedo/papers/bastedo.opensystems.pdf

Blizzard Entertainment. (2017). Retrieved from http://us.blizzard.com/en-us/company/legal/community-competition-license.html

Brenda, H. K. S. (2017). Spectating the Rift: A study into eSports spectatorship. In J. Hiltscher & T. M. Scholz (Eds.), *eSports Yearbook 2015/16* (pp. 9–35). GmbH, Germany: Book on Demand. Retrieved from http://www.esportsyearbook.com/eyb201516.pdf

Brinkley, L. (2016, August 11). Oakland to get a new eSports arena for gamers. ABC 7 News San Francisco. Retrieved from http://abc7news.com/technology/oakland-to-get-new-esports-arena-for-gamers-/1466677

Cano, R. G. (2017, February). Las Vegas to open e-Sports arena. Retrieved from http://www.athleticbusiness.com/stadium-arena/las-vegas-to-open-e-sports-arena.html

Casselman, B. (2015, May 22). Resistance is futile: eSports is massive…and growing. ESPN. Retrieved from http://www.espn.com/espn/story/_/id/13059210/esports-massive-industry-growing

Dorfman, J. (2015, January 31). Publicly financed sports stadiums are a game that taxpayers lose. *Forbes.* Retrieved from https://www.forbes.com/sites/jeffreydorfman/2015/01/31/publicly-financed-sports-stadiums-are-a-game-that-taxpayers-lose/#778b82794f07

Durham Bulls. (2017, August 16). DBAP Gaming Challenge coming to Durham. Retrieved from https://www.milb.com/bulls/news/dbap-gaming-challenge-coming-to-durham/c-248770370/t-196097288

Elder, R. (2017, March 20). The esports audience is escalating quickly. *Business Insider.* Retrieved from http://www.businessinsider.com/the-esports-audience-is-escalating-quickly-2017-3

ENPE Media. (2016). Esports marketing blog. Retrieved from http://esports-marketing-blog.com/

Entertainment Software Association. (2016). Essential facts about the computer and video game industry: 2016 sales, demographic, and usage data. Retrieved from http://www.theesa.com/wp-content/uploads/2016/10/ESA_EF_2016.pdf

Esports Arena. (2017a, March 15). Esports Arena: Drive. Retrieved from https://www.esportsarena.com/drive/

Esports Arena. (2017b, April 11). Esports Arena: Las Vegas. Retrieved from https://www.esportsarena.com/lasvegas

Gatto, J., & Patrick, M. (2016). The new face of eSports venues. Sheppard Mullin. Retrieved from http://www.lawofthelevel.com/2016/03/articles/gaming/the-new-face-of-esports-venues

Gaudiosi, J. (2015, June 9). This company is hosting the first ever eSports event at Madison Square Garden. *Fortune Magazine*. Retrieved from http://fortune.com/2015/06/09/riot-games-esports

Gaudiosi, J. (2016, January 27). How the U.S. is killing it in eSports. *Fortune Magazine.* Retrieved from http://fortune.com/2016/01/27/us-is-killing-it-in-esports/

Gawrysiak, J. (2016). E-sport: Video games as sport. In S. E. Klein (Ed.), *Defining sport* (pp. 207–221). Lanham, MD: Lexington Books.

Grubb, J. (2015, October 28). Esports is already worth $748M, but it'll reach $1.9B by 2018. *Venture Beat.* Retrieved from https://venturebeat.com/2015/10/28/analyst-esports-is-already-worth-748m-but-itll-reach-1-9b-by-2018/

Hamari, J., & Sjöblom, M. (2017). What is eSports and why do people watch it? *Internet Research, 27*(2). doi: 10.1108/IntR-04-2016-0085

Hamilton, W. A., Garretson, O., & Kerne, A. (2014). Streaming on twitch: Fostering participatory communities of play within live mixed media. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2014*, 1315–1324.

Henry, J. (2016, October 27). LA is hosting one of the biggest championships in the world and you (probably didn't know it. *Pasadena Star News.* Retrieved from http://www.pasadenastarnews.com/technology/20161027/la-is-hosting-one-of-the-biggest-championships-in-the-world-and-you-probably-didnt-know-it

Hill, R. A. (2013). Getting up to speed: Event bandwith. Convention Industry Council. Retrieved from http://www.eventscouncil.org/docs/default-source/apex-bandwidth-and-connectivity/Whitepaper_Getting_up_to_Speed_on_Event_Bandwidth.pdf?sfvrsn=0

Homburg, C., Grozdanovic, M., & Klarmann, M. (2007). Responsiveness to customers and competitors: The role of affective and cognitive organizational systems. *Journal of Marketing, 71*(3), 18–38.

Howell, L. (2016, December 6). League of Legends hosts 14.7 million concurrent viewers during Worlds. ESPN. Retrieved from http://www.espn.com/esports/story/_/id/18221739/2016-league-legends-world-championship-numbers

Irwin, A. (2016, December 27). 4 problems facing eSports marketers today. Retrieved from http://blog.votion.co/4-problems-facing-esports-marketers-today

Jenny, S. E., Manning, R. D., Keiper, M. C., & Olrich, T. W. (2016). Virtual(ly) athletes: Where eSports fit within the definition of sport. *Quest.* doi:10.1080/00336297.2016.1144517.

Karakus, C. (2015). Comparing traditional sports and electronic sports. (Unpublished doctoral dissertation) University of Illinois, Urbana, Illinois.

Keiper, M., Manning, R. D., Jenny, S., Olrich, T., & Croft, C. (2017). No reason to lol at LoL: The addition of eSports to collegiate athletic departments. *Journal for the Study of Sports and Athletes in Education.* Advance online publication. doi:10.1080/19357397.2017. 1316001

Kresse, C. (2016a, December 8). 43 million unique viewers reached throughout League of Legends World Championships 2016. eSports Marketing Blog. Retrieved from http://esports-marketing-blog.com/43-million-unique-viewers-reached-throughout-league-legends-world-championship-2016/#.WHzy21MrJQI

Kresse, C. (2016b, January 8). eSports 2015 by the numbers: Attendance figures, investments, prize money. eSports Marketing Blog. Retrieved from http://esports-marketing-blog.com/esports-in-2015-attendance-figures-investments-prize-money/#.WSM7DInytHY

Lee, D., & Schoenstedt, L., J. (2011). Comparison of eSports and traditional sports consumption motives. *Journal of Research, 6*(2), 39–44.

Maddox, T. (2016, August 8). How the NFL and its stadiums became leaders in Wi-Fi, monetizing apps, and customer experience. *Tech Republic.* Retrieved from http://www.techrepublic.com/article/how-the-nfl-and-its-stadiums-became-leaders-in-wi-fi-monetizing-apps-and-customer-experience/

Makuch, T. (2014, April 25). World's first video game stadium gets underway. Retrieved from https://www.gamespot.com/articles/world-s-first-video-game-stadium-gets-underway/1100-6419215

Moth, J. (2014, November 11). Top 5 most popular eSports games right now. Load the Game. Retrieved from http://www.loadthegame.com/2014/11/11/top-5-popular-esports-games-right-now/

Mullin, B., Hardy, S., & Sutton, W. (2014). *Sport marketing* (4th ed.). Champaign, IL: Human Kinetics.

National Association of Collegiate eSports. (2017). NAC eSports. Retrieved from https://nacesports.org/

Newzoo. (2017). 2017 Global eSports market report: Trends, revenues, and audience toward 2020. Retrieved from http://resources.newzoo.com/2017-newzoo-global-esports-market-report-light

Nino De Guzman, J. (2015, February 26). The world's biggest and best eSports arenas. Retrieved from https://www.redbull.com/gb-en/the-biggest-and-best-esports-stadiums-in-the-world

Putterman, A. (2016, July 29). Turner Sports pleased with ratings on first season of 'ELeague.' Awful Announcing. Retrieved from http://awfulannouncing.com/2016/turner-sports-pleased-with-ratings-on-first-season-of-eleague.html

PWC. (2011). Changing the game: Outlook for the global sports market to 2015. Retrieved from http://www.pwc.com/gx/en/hospitality-leisure/pdf/changing-the-game-outlook-for-the-global-sports-market-to-2015.pdf

Richmond Raceway. (2017, August 24). Richmond Raceway to premiere esports tournament with NASCAR Heat 2. Retrieved from http://www.richmondraceway.com/Articles/2017/08/eSports-Tournament.aspx

Sallomi, P., & Lee, P. (2016). Technology, media and telecommunications predictions 2016. London, UK: Deloitte. Retrieved from http://www2.deloitte.com/content/dam/ Deloitte/global/Documents/Technology-Media-Telecommunications/gx-tmt-prediction-2016-full-report.pdf

Shaw, A. (2013). Esport spectator motivation. (Unpublished doctoral dissertation). George Mason University, Fairfax, Virginia.

Tassi, P. (2013, August 24). League of Legends finals sells out LA's Staples Center in an hour. *Forbes.* Retrieved from http://www.forbes.com/sites/insertcoin/2013/08/24/league-of-legends-finals-sells-out-las-staples-center-in-an-hour

Trail, G., Anderson, D., & Fink, J. (2000). A theoretical model of sport spectator consumption behavior. *International Journal of Sport Management, 1*, 154–180.

Tutka, P. (2016). An ideal-type through innovation diffusion: Recording the construction history of football stadiums in the National Collegiate Athletic Association Division I Football Bowl Subdivision (FBS). (Doctoral dissertation). Retrieved from http://etd.lsu.edu/docs/available/etd-03252016-202739

Twitch. (2017). Twitch. Retrieved from https://www.twitch.tv

IBM. (2017). Ustream. Retrieved from http://www.ustream.tv/explore/gaming

Valve Corporation. (2016). The International: DOTA 2 championships. Retrieved from http://www.dota2.com/international/battlepass/

Wann, D. L. (1995). Preliminary validation of the Sport Fan Motivational Scale. *Journal of Sport and Social Issues, 19*, 377–396.

Wann, D., Grieve, F., Zapalac, R., & Pease, D. (2008). Motivational profiles of sports fans of different sports. *Sport Marketing Quarterly, 17*, 6–19.

White, J. C., Varadarajan, P. R., & Dacin, P. A. (2003). Market situation interpretation and response: The role of cognitive style, organizational culture, and information use. *Journal of Marketing, 67*(3), 63–79.

YouTube Gaming. (2017). YouTube gaming. Retrieved from https://gaming.youtube.com/