

Comparative Studies on the Development of the Esports Industry—the USA, Japan, and China

Akinori (Aki) Nakamura

College of Image Arts and Sciences, Ritsumeikan University, nakamu-a@im.ritsumei.ac.jp

Abstract

This study will present the emergence and development of esports in Japan, the People's Republic of China (hereafter referred as China), and the USA. While competitive computer gaming has been around since the 1970s, esports did not take off as a serious business enterprise until the late '90s in the USA and the late 2000s in China. While esports is thriving in the USA and China, it has only recently been recognized by Japan's general public. The studies on this topic reflect this. The study verifies that although competitive gaming activities can be found in both the USA and Japan, they eventually parted ways. In the USA, the esports business ecosystem evolved from a community-driven approach; in Japan, where sponsorship is the primary source of income for the organizer, its purpose remained promotional. In China, the evolution of esports is quite different, as it started as a government initiative. However, the leadership role has currently shifted to the game industry's market; the government still plays a vital role in local regions within China. Modified Hepburn is used for the Japanese romanization.

Introduction

This study presents the emergence and development of esports in the USA, Japan, and China. While competitive computer gaming has been around since the 1970s, esports did not take off as a serious business enterprise until the late '90s in North America and the late 2000s in China. While esports is thriving in the USA and China, it has only recently been recognized by Japan's general public. Studies on the topic reflect this. Many scholars in North America, as well as in Europe, have investigated esports. For example, Wright and Breidenbach (2002) studied the social complexities that game players engaged in *Counter-Strike's* multiplayer mode experienced. Wagner (2006) examines esports and dissects how academics should explore esports. Taylor and Witkowski further scrutinize the competitive gaming culture among local area network (LAN) parties and spectatorship's role in computer gaming (2010). Likewise, Chinese scholars observed various situations regarding esports in China. For instance, Feng (2003) examines esports as an emerging state of these activities and proposes his thoughts to further develop this genre. Li, Wang, and Li expound on esports, categorizing game titles based on the skillsets required.

They emphasize the importance of nurturing these activities to be wholesome and beneficial. They also predict that, with the right guidance, esports will substantially impact human society at large. He (2004) introduces three elements that have attracted consumers to esports: competitions, storytelling, and communication. Then he states the importance of further investigating these phenomena. Hu (2004) compares China's esports events to those overseas, such as in North America and Japan. Xi (2005) examines the possibility of propelling the sports industry in China. Some also discuss the negative aspects of esports activities. For example, Zhang and Meng (2005) warn about extensively training minors for professional electronics gaming. Lei (2005) proposes that government support is necessary for the industry to grow, particularly in managing internet cafes, creating order in the chaotic environment, increasing the prize to the global standard, and exploring healthy growth for its sustainable development.

On the other hand, Japanese scholars' exploration of competitive gaming has been minimal. While Sugiyama (2005) and Matui (2010) explain the ongoing development of esports in Japan at the time, the extensive investigation started around 2013, when several college students began hosting esports events. Kyoji (2013), for example,



investigates a series of survey questionnaires from these events to determine the benefits that these events bring to esports communities. Other studies, such as Shiraishi's, focused on legal restrictions and limitations on giving the high prize to the winner of competitions in Japan (2017).

Research Method and Analysis

The present studies survey primary and secondary sources, including journal articles, interviews, academic papers, and home page information regarding competitive play on digital games in the USA, Japan, and China. The USA and China are selected since they are the leaders of the global esports industry. On the other hand, Japan is an emerging region for forming the esports business ecosystem even though it is known as the region where the video game industry has developed and thrived since the 1970s. Thus, comparing similarities and differences in the esports business ecosystem among these three countries seems appropriate for the initial study.

The data will be analyzed from a business ecosystem perspective defined by Moore (1993), which considers that various enterprises at different stages play a role in achieving the sustainable business operation. Various competitive digital or computer gaming activities in subject countries are gathered in chronological order to clarify multiple actors involved in these activities.

The USA: Community-Driven

In the USA and the rest of the world, for that matter, the first account depicting and analyzing the competitive play of digital games goes back to Stewart Brand, who held the competition himself at the Artificial Intelligence (A.I.) Laboratory at Stanford University on October 19, 1972, with 24 contestants (Brand, 1972). For this event, the essential elements of the competitive form of digital gameplay were already established, such as tournament structures, community development, and journalistic post-report. It is also important to note that from this very first competition, it was community-driven (contestants consisted of college computer users), with the sponsor (*the Rolling Stone* magazine) supporting the event and providing the prize, albeit non-monetary, to the winner.

This form of competition was then adapted after the emergence of arcade games. In 1979, the tournament included arcade game titles: *Atari Football*, *Double Play*, *Trip Hunt*, and *Space Wars*. There also was a "decaathlon" that combined the performance of five pinball games and five arcade games, namely *Space Invaders*, *Breakout*, *Sea Wolf*, *Laguna Racer*, and *Destroyer*¹. During the early 80s, this trend continued with miniature golf, and game room franchisers such as Putt-Putt held a national tournament several times since 1981, while arcade game distributor Silico West Vending carried out regional tournaments¹.

Furthermore, Tournament Games Inc (henceforth, TGI), which had been hosting billiards, foosball, air hockey, and dirt competitions, held the Atari World Championship from October 29 to November 1 in 1981. TGI announced a total of \$500,000 in prizes; over 10,000 participated in the tournament in various games. However, the winner could not receive the award as the check from TGI bounced. The registration fee for getting into the championship was also expensive, at \$60; those who won their region and gained an invitation did not get any support for transportation or lodging expenses (Electronic Games, 1982).

Thus, the organization that could hold a sustainable videogame competition was Atari. Since 1980's National Space Invaders Superbowl (Lion, 1980), Atari had a videogame tournament until the company underperformed with a videogame shakeout initiated in December 1982². The principal purpose of these competitions was promotion; Atari developed all of the titles being competed in. Nintendo succeeded in the strategy to use a game tournament for a national campaign. Nintendo held a national tournament for three consecutive years, 1990–1992. Nintendo's first tournament was called Nintendo World Championship, while the other two events were named the Nintendo Campus Challenge and the Super Nintendo Campus Challenge in 1991 and 1992. Nintendo categorized these events as event market (Sheff, 1999, p. 181). 1990–1992 was a crucial time for Nintendo, as it was about to introduce a new console that followed the hugely successful Nintendo Entertainment System.

Following Atari and Nintendo, Capcom also had game competitions to promote its games. The first US Street Fighter tournament was held in 1991 (Woolums, 2017).

¹ The Golden Age Historian. "Score Winter Olympics: Early Videogame Tournament and Players." *The Golden Age Historian*, April 9, 2013. <https://allincolorforaquarter.blogspot.com/2013/04/early-video-game-tournaments-and-players.html>

¹ The Golden Age Historian. "Putt Putt National Tournaments. More Golden Age Tournaments" *The Golden Age*

Historian, July 15, 2013.

<http://allincolorforaquarter.blogspot.com/2013/07/more-golden-age-tournaments.html> >

² Various tournaments were reported in *Atari Age* 1, no.1 (June 1982):5, *Atari Age* 1, no.2 (August 1982):3

Players of *Street Fighter II*, one of the first digital games that allowed players to fight head-to-head, nurtured the fighting game community. Capcom decided to employ one of the fighting game community leaders, James Goddard, as part of its managing team (Baker, 2016). Goddard eventually became the director for various fighting and multiplayer action games such as *Killer Instinct* and *Overwatch*. Goddard is one of the most prominent professionals to contribute to esports' evolution. Since *Street Fighter II*'s launch, companies such as SEGA, Namco, Rare, and Midway games have developed fighting games, and the number of passionate players has grown steadily. This growth led to one of the earliest community-driven competitive game tournaments, Battle by the Bay, in 1996. The main organizing members and passionate four gamers, namely, Joey Cuellar, Tom Cannon, Tony Cannon, and Seth Killian, communicated through online message boards and newsgroups and eventually decided to hold the first tournament at Golfland in Sunnyvale, CA.

The first event's contestants were mostly from California. The event continued to grow and changed its name to Evolution Champion Series (EVO) in 2002. Arcade games' popularity as casual entertainment continued to decline during this time, along with the entire fighting game genre. Despite industry trends, the EVO community continued to grow by focusing on the community's needs rather than those of the game publishers. Eventually, the organizing team split up; Joey Cuellar remained and eventually became the CEO of Triple Perfect Inc., EVO's managing company. The other core members also climbed the ladder to career advancement within the game industry, paving the way for strengthening the esports business. Tom and Tommy Cannon founded the company that provides a seamless network gameplay system and the free-to-play network fighting game, *Rising Thunder*; then, their company was acquired by Riot Games. After the acquisition, Tom Cannon assumed senior producer's role for an unnamed fighting game property for Riot, while Tommy Cannon became a technical director. On the other hand, Seth Killian became the chief fighting game community evangelist at Capcom USA, followed by working for Sony Computer Entertainment and Riot Games, and is currently working at Epic Games.

1996 was a pivotal year for the first-person shooting game (hereafter, FPS) community as well. With the release of *Wolfenstein 3D* and the *Doom* franchise by id Software, first-person shooting games flourished among PC gamers. Furthermore, the networked multiplayer gameplay mode for *Doom* gave birth to the rapid expansion of the competitive gameplay community (Taylor, 2012, p.7). With the release of *Quake*—an FPS developed by id Software after two *Doom* titles—game enthusiasts decided to hold a bring-your-own-computer LAN game tournament on August 15–18, 1996. The venue they chose was a hotel near id Software's headquarters, hoping that some developers would show up during the event. Shortly after observing the community grow steadily, id Software decided to sponsor the event from 1999 (Hayward, 2018). Other game studios followed this step. Blizzard hosted its first conference in 2005, and the event became an important milestone for making new announcements for the company and the community. In the meantime, some considered the rising popularity of competitive gameplay as a business opportunity. Angel Munoz, a former stockbroker and owner of an investment firm, established the Cyberathlete Professional League (the CPL)³. After managing video game publications for a few years, he realized that game media only focused on game titles or developers, while game players were considered mere consumers. Thus, he decided that the CPL should focus on players, like professional sports focus on athletes. Having worked in the game media before, he realized that branding and advertisement proposals might cause skepticism within the game industry; thus, he decided to focus on proposing high-tech companies such as Nvidia and Intel to brand them within the gaming environment (Gaudiosi, 2013). This concept paid off. By August 2010, when Munoz sold the company to the Singaporean investment firm, it had hosted over 60 international tournaments across both North and South Americas, Europe, and Australia, with over \$3 million cash prizes⁴. Sundance DiGiovanni and Mike Sepso then followed this model. They established a professional gaming league, initially dedicated to console game titles, Major League Gaming (hereafter MLG), in 2002. By 2012, MLG had “millions of LIVE viewers, fans, and competitors worldwide” (Taub, 2012). The successful track record led to the acquisition of the company by

³ Based on the introduction of Angel Munoz in the official home page of his company, Mass Luminosity, accessed, October 20, 2020. <https://massluminosity.com/angel.html>

⁴ *ibid.*

Activision Blizzard in 2016. Shortly after securing top management positions at Activision Blizzard, DiGiovanni and Sepso established another esports infrastructure company that focused on B2B esports operations, Vindex, in 2019.

But the company that paved the way for the full potential of esports is Riot Games. Two years after releasing *League of Legends*, Dreamhack, one of the major esports leagues in Europe, hosted *League of Legends*' first world tournament in Sweden in 2011. Having a tournament filled with fans at the convention center and hundreds of thousands of viewers, Riot decided to host the World Championship Series in-house from 2012 around this time. There was a rising in online game-centric live streaming services such as Twitch, which helped boost *League of Legends*' presence in the esports scene. By 2013, the event was held in the Staples Center, one of the USA's major sports arenas. Even then, the tickets were sold out in an hour.

Furthermore, 32 million people watched the broadcast through Twitch (Smith, 2019). This in-house global tournament has also been adapted almost concurrently by Valve, the developer and the publisher of *Dota 2*, which hosts The International *Dota 2* Championships each year, bringing together professional players from around the globe to events with over a million peak concurrent viewers online (Yakimenko, 2019). The overall perspective of today's esports business ecosystem is described in Figure 1 in the appendix.

Japan: Marketing Campaign Driven

Japan was active in hosting competitive gaming activities initially. In 1974, SEGA took the initiative to hold a national competition for TV games⁵. Then, IPM, headed by Kenzo Tsujimoto, who later established Capcom, held a series of regional competitions of Breakout type games in Hiroshima, Nagoya, Osaka, and Tokyo from November 1978 to March 1979. For Nagoya and Osaka, the total contestants counted 1490 and 1200, respectively, and the

winner in each region received a Mazda RX-7⁶. *Space Invaders* also became the subject for game competitions. Toei Towa, a Japanese film distributor, hosted the TV Game Invader National Championship competition on May 15, 1979. This competition was planned as a part of the promotional activities for the Hong Kong film, *Mr. Boo Part II Operation Invader*, released on May 26, 1979, in Japan⁷. This was one of the early examples of the non-game industry using competitive digital gameplay tournaments for promotional activities of non-game products.

In 1982, NEC, a major personal computer manufacturer, held a competition for a promotional campaign⁸. In 1984, Konami also hosted an international *Hyper Olympic* competition with the final in Tokyo; the USA's regional qualifiers got a free trip to Tokyo, where they competed for the high score (Baker, 2016). However, one of the most culturally influential events took place after the launch of the console game, *Family Computer*. Hudson, one of the software studios that supplied video games for the console, decided to have national tournaments for shooting games it produced. A series of regional tournaments and the final tournament were recorded and aired on national television. Hudson assigned one of its employees, Toshiyuki Takahashi, to be a symbolic figure for these competitions. He became one of the early stars of competitive gaming (Takahashi, 2016). These game competitions changed over time but lasted until 2006⁹. In the meantime, the rise of the fighting game also led various amusement centers to hold local tournaments to promote their facilities. Game publishers, such as Capcom and Sega, also held national tournaments. During the height of the movement, they drew over 8,500 participants¹⁰ in 1993. Even non-game related companies, such as Asahi Beverages, sponsored national game competitions¹¹. Being an editor of *Gamest Magazine* at the time, Masashi Sawatari experienced *Street Fighter II* for the first time and realized how exciting the fighting game could be. Thus, Sawatari proposed that Capcom hold a tournament called the Gamest Cup; the first tournament

⁵ The Golden Age Historian. "Early Videogame Tournament and Players." *The Golden Age Historian*, April 9, 2013.

<https://allincolorforaquarter.blogspot.com/2013/04/early-video-game-tournaments-and-players.html>The Golden Age Historian 2013.

⁶ Game Machine, "Moriagaru Nagoya, Ōsaka: Tēburu TV Gēmu Zenkoku Jūdantaikai" *Game Machine*, January 1, 1979, 9

⁷ Game Machine, "Mr. Boo! Inbēdā Daisakusen: Go Gatsu Jugo Nichi ni TV Gēmu taikai Shusai: Toei Towa, Kōen: Jatore" *Game Machine*, April 15, 1979, 3, The release date for *Mr. Boo! Inbēdā Daisakusen* is based on the information provided in Movie Walker Plus

<https://movie.walkerplus.com/mv11722/>

⁸ Nikkei Business Daily, "NEC Shōrūmu, Pasokon Tenisu 'Championtaikai' Hiraku." *Nikkei Business Daily*, November 15, 1982, 4

⁹ Nikkei Business Daily, "Hitto Annainin: Hadoson Mējin Takahashi Toshiyuki-shi: Kyū nenburi ni Fukkatsu. Gēmu Taikai 'Kyaraban'" *Nikkei Business Daily*, August 23, 2007, 2. (In Japanese)

¹⁰ Nikkei Business Daily, "Gēmu Zenkokutaikai Kaisai, Kapukon, Shinsakusofuto Hansokue." *Nikkei Business Daily*, June 28, 1993, 7. (In Japanese)

¹¹ Nikkei Ryūtsū Daily "Sega Asahibiru Inryō, Zenkokukibo de Gēmu Taikai: Shisetsu de Gēmukyara Inryō." *Nikkei Ryūtsū Daily*, June 1, 1996, 14 (In Japanese)

took place in August 1991, only a few months after the game's official launch. After this, Gamest collaborated with game publishers who launched new fighting games to host national tournaments jointly. Gamest Cup continued until Shinseisha, the company published Gamest, went bankrupt in 1998 (Matsui, 2018). Despite the variety of organizations involved in hosting video game tournaments, these competitive gaming events were ultimately planned and implemented for promotional purposes.

The initial motive for creating the national fighting game tournament, which would later be named Togeiki, was no different. Yasuaki Matsuda, the arcade center manager at Ohyama Newton who had been hosting local fighting game tournaments for several years, wished to have a national tournament by associating with other arcade outlets throughout Japan. Thus, he approached Masashi Sawatari, who left the bankrupted Shinseisha to be employed at Enterbrain as a chief editor of the arcade game-dedicated magazine *Arcadia* at the time. Matsuda proposed to host the national fighting game tournament, with regional qualifiers held at the arcade centers in each region (Sasaki, 2019). At that time, Sawatari also wanted to host the national tournament focusing on fighting games, repeating his success with Gamest Cup. Still, he knew that hosting it with only a media outlet would not be feasible. Thus, he decided to be the co-founder of the event, Togeiki (Matsui, 2018). The Togeiki tournament started in 2003 and lasted until 2012. The initial motive for the tournament was to promote the arcade game scene. Matsuda, observing so many passionate game players practicing over five hours to get ready for the tournament, realized that contestants should be treated as athletes (Sasaki, 2019). Thus, unlike the Gamest Cup, Togeiki's organizer took the initiative in selecting the titles to be contested rather than publishers establishing them for marketing purposes.

Furthermore, for the final tournament, spectators are required to purchase entrance tickets, and merchandise is also an essential part of the business. With competitive gaming for fighting games slowly gaining popularity in the Japanese gaming industry, various professionals finally became active in promoting esports in Japan, which attempted to follow the model established in the USA and Korea. In 2000, the Korean company Battle Top established a subsidiary in Japan to market esports there. Initially, Battle Top Japan was responsible for hosting the

regional qualifier tournament for the World Cyber Games in Japan¹². In June 2003, Namco opened the LAN entertainment experimental shop, LEDZONE. This experimental internet gaming amusement center was the flagship site for operating *Counter-Strike Neo*—a heavily modified version of *Counter-Strike* that Namco developed with Valve to target the Japanese audience. LEDZONE even held Japan's regional qualifiers for the World Cyber Games (WCG) and the Cyberathlete Professional League (CPL). Unfortunately, this experimental shop remained "experimental" and quietly shut down on April 24, 2008 (Sugiyama, 2008).

Among all of these endeavors, the one that endured until recently was initiated in 2007 when the Japan eSports Association Preparation Committee was established. Leng (2020) summarizes the various efforts to spread esports. Although the Japan eSports Association Preparation Committee remained preparatory until 2015, it actively engaged in various activities to promote esports. For example, the Japan eSports Agency, which focuses on hosting and managing esports events, was established in 2011 and is closely associated with the Japan eSports Association Preparation Committee. It hosted the first Japan Cup for esports in 2011 and continued the event until 2013. Meanwhile, three other sports-related associations were organized, attempting to gain the first-mover advantage in the game industry's emerging sector.

With the sentiment that esports may be included in future Olympic Games, all of these organizations were unified into the Japan Esports Union (hereafter, JeSU). Without unified associations, it would be impossible to send the athletes who represent Japan. Although the International Olympic Committee official stated that it was still too early to include esports in the 2024 Olympics (Morris, 2018), the unification of various esports associations strengthened JeSU.

JeSU closely worked with the government in clarifying some legal issues, such as the inability to raise prize money, which prevented the event organizers from boosting esports activities.

Meanwhile, game publishers that own esports game titles began to host their events as esports rather than mere marketing campaigns. For example, Capcom started the Capcom Cup in 2013. XFLAG, the studio behind the popular game app *Monster Strike*, initiated the game

¹² Based on Battle Top Japan official homepage as archived in *archive.org* retrieved on July 11, 2001.

<https://web.archive.org/web/20010701112121/http://www.battletop.co.jp/main.html>

tournament Monster Strike Grand Prix in 2015. Gravity also held its first Puzzle & Dragons International Championship in 2016. A one-million-dollar prize was awarded for the first time for the Japanese game at the Shadowverse World Grand Prix, hosted by Cygames, in December 2018. Although some tournaments had over 80,000 participants and over eight million viewers in 2019¹³, it has yet to reach the peak number of the viewers found in the USA or China. Some of these events continue to lack non-Japanese viewers. Recently, JeSU has collaborated with the Ministry of Economy, Trade and Industry (METI) to establish a long-term goal of boosting the esports industry. The collaboration's goals include finding and establishing star players, increasing the venue's attractiveness, and eliminating some legal barriers to hosting esports events (JeSU 2020). These situations are represented in figure 2 in the appendix. While it is encouraging that the organization is getting government assistance in developing the esports industry, various issues raised by JeSU also suggest that Japan is still in the emerging phase of developing the esports business ecosystem. JeSU's comprehensive proposal for Japan's esports business' long-term goal further confirms Leng's (2020) conclusion that Japan is far behind China in developing an esports business ecosystem.

China: Government Initiative Shifting to Corporate

As for China's esports business ecosystem, Nakamura (2018, 340-347) introduced the model shown in Figure 3. While the business ecosystem described in Figure 3 represents recent developments, competitive gameplay has been popular since internet cafes started operating in China, albeit the majority of games played from the late 90s to the early 2000s were pirated copies. To boost the information infrastructure, the Ministry of Industry and Information Technology (MIIT), along with the Ministry of Culture, the Community Youth League of China, and information and communication companies supported China's first nationwide game competition, China Internet Gaming. The General Administration of Sports (hereafter GAS) also endorsed the nationwide tournament. As a result, Intel sponsored China eSports Games in 2003. On November 18, 2003, GAS officially announced esports as

a category 99th sport (Nakamura 2006). Esports as a business opportunity, however, expanded around 2010 when the GAS Information Center hosted the National Electronic Open Competition, with a prize of 323,000 yuan (USD 45,220)¹⁴. Then, in 2013, GAS again hosted the National Electronic Sports Open (NESO). Several other national tournaments have been held since then, including National Electronic Sports Tournament (NEST). The rise of online broadcasting services set these esports competitions apart from previous events in early 2000. Fuya, DOYU, and Bilibili were founded and eventually became the major force in broadcasting esports events through the internet. Major game publishers, such as Tencent, having Riot, Supercell, and Epic Games under its umbrella, also developed their own proprietary titles such as *the Arena of Valor* and *PUBG Mobile*. NetEase, which has the exclusive license to operate Blizzard's *Overwatch* and *Hearthstone*, also has an esports title, *Knives Out*. When the League of Legends World Championship took place at Beijing's Bird's Nest in 2017, the tickets sold out quickly, and the number of peak online viewers reached 99.6 million people worldwide (Porter, 2019). Esports events with such a global scale continued to be held in China's major cities, such as Shanghai, implying that China is one of the major global regions for esports. Regional governments have also been keen on this movement. With subsidies provided by the local government, various esports arenas were established to promote regional leisure activities with esports (Leng, 2020).

Therefore, the government's initial support handsomely paid off, having China's esports ecosystem seamlessly connected to the global esports community.

Tentative Conclusion and Future Studies

Thus far, the studies have found that the business ecosystem for esports in the USA began with a promotional campaign but mainly evolved from the community-driven approach, with sponsorship as the organizer's primary source of income. These activities were relevant for various companies that intended to increase brand awareness among the youth; thus, they formed interlocking relationships. However, recent major players are publishers of esports game titles, namely, Valve (the publisher of *Dota 2*), Blizzard (the publisher of *Overwatch*), or Riot Games

¹³ Number based on the official release from the event organizer, *Niconico Tōkaigi*, accessed October 10, 2020. <https://blog.nicovideo.jp/niconews/114437.html>

¹⁴ 1 Yuan= 0.14 USD

(the publisher of *League of Legends*). It is also vital to note that those who took the initiative in nurturing the esports community were able to have a successful career in the game industry.

In Japan, the initial movement on competitive game activities has a common origin: the USA's promotional campaign. Their path began to be parted as these competitions' purpose remained to be a part of Japan's promotional campaign, whether for arcade game business or console game titles. With the PC games having a lesser presence in the market, various attempts to faithfully recreate esports scenes in Korea or the USA have repeatedly failed until recently. On the other hand, several game publishers are still conservative about their approach to esports. Furthermore, as Leng (2020) points out, Japan's esports scene seemed isolated from the rest of the world with a limited presence of globally contested game titles, such as *Dota 2*, *Arena of Valor*, and *League of Legends*.

In China, the government has played more central roles in boosting esports as an industry, from recognizing esports as sports in 2003 to creating tax reduction plans for establishing esports arenas for regional development. Furthermore, Tencent, the parent company of Riot Games and the developer of *Arena of Valor*, provides funding to vocational schools that teach esports and sports live streaming courses.

Further examinations are needed to clarify these regions' similarities and differences from the sociopolitical and industrial perspectives concerning esports. The situations in Europe, Korea, other Asian regions, South America, and Africa also need to be scrutinized further to analyze the global esports business ecosystem's overall landscape.

References

- 4gamer.net "Itsuka Kanarazu `Tōgeki o Fukkatsu Sa semasu: Gēmu Nyūtonōnā Matsuda Yasuaki-shi ga Kataru Kakutō Gēmu Shiin no Kako to Mirai." 4gamer, April 27, 2019.
<https://www.4gamer.net/games/999/G999905/20190424030/>
- Baker, Chris. "James Goddard saw the birth of the Street Fighter II phenomenon." Gamasutra, February 12, 2016.
<https://www.gamasutra.com/view/news/265386/James_Goddard_saw_the_birth_of_the_Street_Fighter_II_phenomenon.php>
2016 "How Konami's 'Track & Field' Launched World's Biggest Game Tournament: Olympics video game with just three buttons became an Eighties arcade phenomenon and earned three U.S. teenagers a trip to Tokyo Championships" Rolling Stone, August 16, 2016.
<https://www.rollingstone.com/culture/culture-news/how-konamis-track-field-launched-worlds-biggest-game-tournament-103592/>
- Brand, Stewart. 1972 "Spacewar!: Fanatic Life and Symbolic Death Among the Computer Bums." Rolling Stone. (December 1972)
- Electronics Games "Tournament Fiasco." Electronic Games (March 1982): 28
- Feng, yu-chao. "Preliminary study about the development of E-sport." Zhejiang Sport Science, vol 25, no.5(2003):48-51. (In Simplified Chinese)
- Gaudiosi, John. "CPL Founder Angel Munoz explains why he left esports and launched Mass Luminosity" Forbes.com, April 9, 2013.
<https://www.forbes.com/sites/johngaudiosi/2013/04/09/cpl-founder-angel-munoz-explains-why-he-left-esports-and-launched-mass-luminosity/>
- Hayward, Andrew. "Pro players, id Software and Bethesda employees reflect on the legendary con's competitive origins and staying power in 2018 and beyond." Redbull.com, August 29, 2018.
<https://www.redbull.com/int-en/quakecon-retrospective-interviews>
- He, Wei. Dian zi Jingji de Xiangguang Gainian yu Lieixing Fengxi The Journal of Sport History and Culture, vol 05 (May 2004):11-13 (In Simplified Chinese)
- Hu, Jian. "The Current Situation and Tendency Of E-Sports Competition Under The Background Of Digital Sports." Journal of Chengdu Physical Education Institute 30, no.3 (2004):18-21 (In Simplified Chinese)
- Inokawa, Yu. "Takahashi Mējin Intabyuu: Zenpen: Takahashi Mējin Tanjohiwa: Kanreki o Mukaeta Densetsu no 16 Shotto!" Esports World, April 8, 2020.
<https://esports-world.jp/interview/4658> (In Japanese)
- Japan esports Union (2020) "Keizaisangyōshō Itakujigyō eSupōtsu o Kasseika Saserutame no Hōsaku ni Kansuru Kentōkai Hōkokusho o Kōkai" JeSU News, March 13, 2020.
<https://jesu.or.jp/contents/news/news-200313/> (In Japanese)
- Kyoi, Yuki. "Dejitaru Kyōgi niokeru Sankasha no Kontentsukanshindo ni kansuru Jisshō kenkyū." Master's Thesis 02 College of Image Arts and Sciences Ritsumeikan University (2013): 29-43 (In Japanese)
- Lei, Xi. 2005 "Present situation and strategies of esports games in China." Zhijiang Sport Science, vol 27, no.1 (February 2005):22-25 (In Simplified Chinese)
- Lei, Xi, and Si-yong, Xia. "Research on the Current Situation and Strategy Consideration on the Development Way of E-sports Games Industry in China." Journal of Beijing University of Physical Education vol 25, no.8 (August 2005):1033-10 (In Simplified Chinese)
- Leng, Shuru. "eSupōtsu Bijinesu niokeru Ekoshisutemu no Hikaku Kenkyū Chūgoku to Nihonno Genjō wo Chūshinni." Master's Thesis 08. College of Image Arts and Sciences, Ritsumeikan University (2020):83-102 (In Japanese)

- Li, Zong-hao, Jian Wang, and Bai Li “Special Lecture: Study on Conception, Category and Development Process of E-sports.” *Journal of Chengdu Physical Education Institute* vol 19, no.1(2004):1-3 (In Simplified Chinese)
- Lion, Ed. “Space Invader Superbowl—I’ve heard of a guy with an \$80-a-night habit” UPI Archive, Nov 9, 1989. <https://www.upi.com/Archives/1980/11/09/Space-Invaders-Superbowl-Ive-heard-of-a-guy-with-an-80-a-night-habit/9704342594000/>
- Matsui, Munetatsu. “Gēmesuto-hai no Tanjō to Shō metsu: Taisen Kakutō Gēmu Taikai o Tsukutta Otoko, Saruwatari Masashi < Zenpen >” *Alienware Zone*, January 26, 2018. <https://alienwarezone.jp/post/666> (In Japanese)
- _____. 2018 “Gēmesuto-hai no Tanjō to Shōmetsu: Taisen Kakutō Gēmu Taikai o Tsukutta Otoko, Saruwatari Masashi < Kōhen >” *Alienware Zone*, March 15, 2018. <https://alienwarezone.jp/post/776> (In Japanese)
- Matsui, Yuu. 2010 “Dejitaru Gēmu wo Kyōgishite Toraeru ‘E-Sports’” In *Degitaru Gēmu no Kyōkasho* edited by Degitaru Gēmu no Kyōkasho Sēsaku Iinkai,247-266.Tokyo: Softbank Creative (In Japanese)
- Moore, James. F., 1993 “Predators and prey: a new ecology competition.” *Harvard Business Review* 71 (May–June 1993): 75-86 <https://hbr.org/1993/05/predators-and-prey-a-new-ecology-of-competition>
- Morris, Chris. “Video Games Won’t Be Part of the Paris Olympics” *Fortune*, December 10, 2018. <https://fortune.com/2018/12/10/olympics-video-games-paris-2024/>
- Nakamura Akinori. (2006) “Chūgoku Esupōtsu no Genjō Kaigaishijō Anarishisu.” *F-ism.net*, April 28, 2006 Archived in “Nakamura Akinori no Gēmu Sangyō Kenkyūnōto Gurōbaru-hen.” *Famitsu*, March 1, 2018. https://www.famitsu.com/serial/nakamura_game_industry/201803/01152879.html (In Japanese)
- _____. *China Game Industrial History*: Tokyo: KADOKAWA ASCII Research Labradorites, 2018
- Sugiyama, Junichi. “The present condition of e-Sport culture and its future: The Community of the computer games seizes a market.” *Journal of Japan Society of Kansei Engineering* 5, no.3. (2005): 3-10 (In Japanese)
- _____. 2008 “LEDZONE Kamata-ten ga Heiten: Ōzei no Fan ga Wakarewo Oshimu” *Inside*, April 24, 2008. <https://www.insidegames.jp/article/2008/04/24/28663.html> (In Japanese)
- Takahashi Mējin. 2016 “Takahashi Meijin ga Kataru: Takahashi Toshiyuki ga ‘Takahashi Meijin’ ni Natta Hi.” *IT Media*, May 25, 2016. <https://www.itmedia.co.jp/business/articles/1605/25/news027.html> (In Japanese)
- Taub, Alexander. “It’s A Gamer’s World: Interview With Sundance DiGiovanni, CEO and Co-founder of Major League Gaming.” *Forbes*, October 11, 2012. <https://www.forbes.com/sites/alextaub/2012/10/11/its-a-gamers-world-interview-with-sundance-digiovanni-ceo-and-co-founder-of-major-league-gaming/#195d977b5780>
- Taylor, T.L. *Rising the Stake: E-Sports and the Professionalization of Computer Gaming*. Massachusetts and London: The MIT Press, 2012.
- Taylor, T.L., and E.K. Witkowski (2010) “This is how we play it: what a mega-LAN can teach us about games.” *The Fifth International Conference on the Foundations of Digital Games*, 2010. <https://dl.acm.org/doi/abs/10.1145/1822348.1822374>
- Wagner, Michael, G. “On the Scientific Relevance of eSports” *ICOMP 2006*, 2006 https://www.researchgate.net/publication/220968200_On_the_Scientific_Relevance_of_eSports
- Woolums, Ken. “Street Fighter II’s place in video game history” *ESPN.com*, May4, 2017. https://www.espn.com/blog/statsinfo/post/_id/131719/street-fighter-iis-place-in-video-game-history
- Zhang, Peng, and Xiang-xiu, Meng. “A Study of legal issues existed in the training under age players for electronic sports games.” *Journal of Physical Education* vol 2. (2005): (In Simplified Chinese)

References (Games)

- Blizzard Entertainment 2016. *Overwatch*, Irvine, the USA: Blizzard Entertainment
- Capcom 1991 *Street Fighter II*: Arcade, Osaka, Japan: Capcom
- Le, Minh and Cliffe, Jess. 1999. *Counter-Strike*: PC, Seattle, the USA: Valve
- PUBG Corporation. 2018. *PUBG Mobile*: iOS/Android OS, Shenzhen: the PRC: Tencent Games
- Riot Games, 2009. *League of Legends*: PC, California, the USA: Riot Games
- Russen, S. 1962. *Space War!*:DEC PDP-1
- TiMi Studio. 2016 *Arena of Valor*, Shenzhen, the PRC: Tencent Games
- Valve, 2013. *Dota 2*: PC, Seattle, the USA: Valve

Appendix

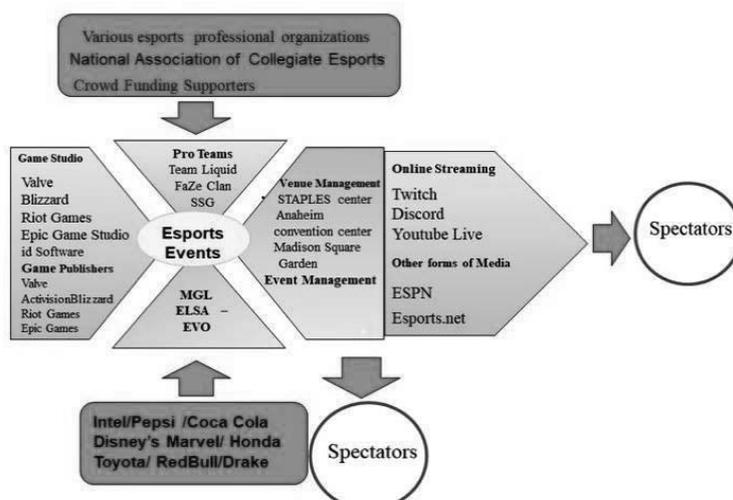


Figure 1 Esports Business Ecosystem in the USA

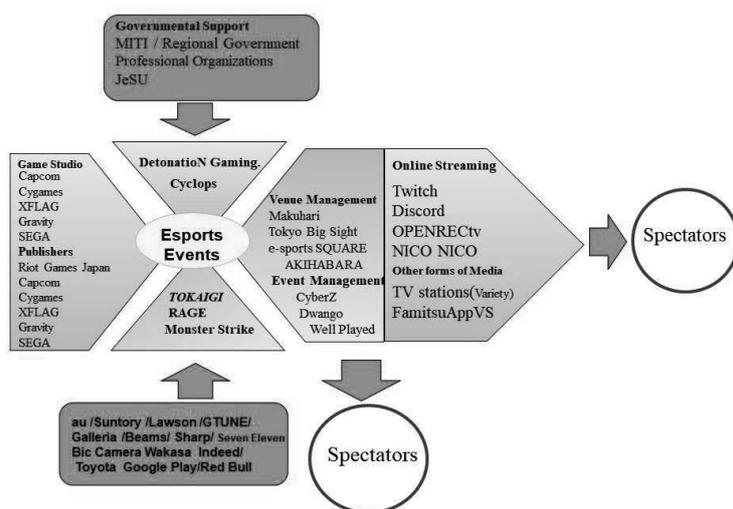


Figure 2 Esports Business Ecosystem in Japan

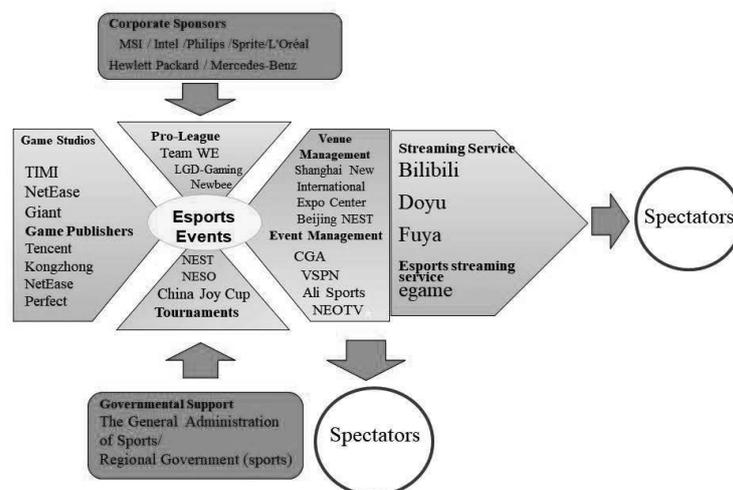


Figure 3 Esports business ecosystem in the PRC –the model modified from Nakamura (2018)