

For the Esports Development in Japan

~ From the perspective of further market growth and social
significance ~

March, 2020 (Reiwa 2)

Investigative Commission on Measures for Vitalizing Esports

(Bureau : Japan Esports Union)

(Subcontractor : KPMG Consulting Co., Ltd. Japan)

(English Translation : KPMG Consulting Co., Ltd. Japan)

Preface

One of the driving forces behind the growth of the content industry in Japan has been the gaming industry. Esports is currently the key figure of the gaming industry and the expectation toward esports is rapidly increasing.

Japan is undoubtedly one of the powerhouses of game industry in the world but it is currently lagging behind in terms of esports business. One of the reasons for this stems from the fact that Japan was indeed a powerhouse of game industry, mainly console games in fact, that had resulted in the slow domestic development of PC games, which has become the mainstream of the global esports scene. On the flip side, however, this is a strong indication that Japan has high potential and competitiveness to outperform other esports-developed countries, and it is now Japan's turn to face development of esports.

In terms of creating an environment for the healthy and multifaceted development of esports, the Japan Esports Union (JeSU) was established in 2018.

This 2018 shall be the establishing year of esports in Japan. Large events are being held, sponsors are gathering, and companies from a wide variety of industries, including professional sports organizations, media, and event companies, are entering esports. At the 18th Asian Games (2018/Jakarta, Palembang), where esports was adopted as a demonstration event, a Japanese high school student attracted high attention by receiving a gold medal in a soccer video game. Since then, the social recognition of esports has been growing rapidly, with the national esports championship also being held in October 2019 as part of the cultural program of the National Sports Festival.

On the other hand, the global wave of technological innovation is indispensable to the development of esports. After the digitalization in the 1990s and the smartification in the 2000s, the era of AI (Artificial Intelligence) and the Internet of Things (IoT) has arrived. We are also facing the era of 5G communication. With 5G, the main battlefield may shift from PCs to smartphones and to cloud, changing the nature of competitive gaming and the way fans enjoy it. The impact of 5G will change the structure of the industry, which could be a threat to the industry, but this wave of simultaneous change could also be a great opportunity for Japan to catch up in the esports field.

In response to the current circumstances, the "Intellectual Property Promotion Plan 2019," published by the Intellectual Property Strategy Headquarters, describes the efforts in esports as follows. "Also, with regard to esports, which has been attracting attention as a new content field growth area in recent years, it is necessary for related ministries and agencies to make necessary efforts to develop an appropriate environment for sound development, such as resolving institutional issues, as well as to study the expansion of the market to peripheral industries, the social significance and ripple effects. And industry, academia, government, and communities must collaborate to execute these efforts." The stance of the government has been clarified.

"Investigative Commission on Measures for Vitalizing Esports " was established in this backdrop. 16 members including esports experts or from companies, organizations, etc. which in the future may be included as the esports industry field due to the expansion of esports industry (which includes: game developer, event organizer, community member / player, market participants from related device manufacture / financial service / tourism / media / etc., local government, legal

practitioner, participants of education / welfare) were commissioned, and has been discussing the measures for vitalizing esports. The followings are examples of what had been discussed by the IC: how the number of esports fans can be increased in the market, how to expand the esports footprint not limited to an industry but in the wider range of related-fields such as education, culture, and society. The result of the discussion is summarized in this report.

Japan will be hosting a series of major global events, which is a golden opportunity for Japan. The Tokyo Olympic and Paralympic Games in 2020, followed five years later by the Osaka-Kansai Expo in 2025. It will be my greatest pleasure if the result of the discussion by the commission (long-term goals and the growth measurement to achieve the goal, proposal regarding the social significance of esports) is widely shared, leading to the increase of presence of Japan's esports, as well as esports making the society more prosperous, communities more well-being, and people's lives more enjoyable and vibrant.

Investigative Commission on Measures for Vitalizing Esports

Chair: Ichiya Nakamura

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Chapter 1 Background, goal and the method of Investigative commission

1-1. Purpose

Esports, an emerging industry that has been attracting a growing number of people in many countries. It has been gaining popularity in Japan in recent years and is expected to become a growth field in the Japanese content market. According to a survey by a private company, the market scale of esports as a part of the gaming industry, which includes sponsorship fees, broadcasting rights and ticket sales, is estimated to be about 4.8 billion yen as of 2018 while some experts expect that it will reach around 10 billion yen in 2022.

Moreover, esports will likely have economic ripple effects to surrounding markets and industries, as well as the gaming industry. Furthermore, esports is expected to have social significance in variety of fields through such economic effects.

Understanding esports in a broader perspective and by researching, analyzing, and sharing the overall picture of the broadly defined esports market will help esports related companies and organizations to formulate their management strategies. Also, it will be effective to organize and share the history of development and the current situation in countries where discussions and examinations regarding esports have been taken.

However, there have only been a few cases in Japan where people comprehensively discuss and examine esports, much less regarding its social significance. It is important to discuss esports from this viewpoint to achieve healthy and multilateral development of the industry.

On this notion, the “Japan Esports Union” (hereinafter referred to as “JeSU”) has been entrusted "FY2019 Project for Development of Environments for Creating New Content (Project for Research on and Analysis of Market Scale and Other Elements for e-Sports)" from the Ministry of Economy, Trade and Industry (hereinafter referred to as “METI”), and has inaugurated an “Investigative Commission on Measures for Vitalizing Esports” (hereafter referred to as “IC”) to carefully study the matter.

The IC mainly discussed the following two points.

(1) Estimating the market scale of esports in Japan, including economic effects rippling to surrounding markets and industries, and conducting research on the background of how esports has developed in foreign countries and then analyze the results.

(2) Streamlining and discussing the social significance of esports based on the current situations of a variety of efforts in Japan. challenges, future perspectives and other issues with such significance, and grasp an idea of the situation.

1-2. Method

As described in the following (1) and (2), JeSU has implemented the research and analysis on esports within domestic and foreign countries and streamlined the social significance of esports in Japan.

(1) Research and analysis on esports within domestic and foreign countries and streamlining and discussing the social significance of esports

(A) Estimating the market scale of esports in Japan, including economic ripple effect to surrounding markets and industries

Esports will likely have economic ripple effect to surrounding markets and industries, as well as the gaming industry. Therefore, we will estimate the market scale of esports in Japan, including economic ripple effect to surrounding markets and industries. When estimating, we will discuss on which market and industry (as examples listed below) to be included as the surround field.

Moreover, investigation of the size and market share of companies (who entered the market, etc.) at the time of the survey, and the degree of difficulty in entering new markets by categories will be conducted.

【Examples of markets and industries which may be included as surrounding fields】

- ① Market expansion
 - Gaming ware / chair
 - Gaming PC / mouse
 - Esports-related merchandise
 - Speaker, monitor, telecommunications equipment, network environment, anti-cheat device, etc.
- ② Universal design
 - Devices for disabled (PC, mouse, etc.)
 - Healthcare, health promotion
- ③ Human resource development, interdisciplinary research
 - Academy, Highschool, University
 - Game and IT system developer training, Industry-Academia collaboration, etc.
- ④ Generating new industry
 - Tournament management, certification authority, consulting service
 - Financial service
 - Organize professional team, community business, league management, etc.
- ⑤ Regional revitalization

- Training facility management, event venue (stadium) management, etc.
- ⑥ Cool Japan, international relationship
 - Event tour, promotion of travel industry, integrated resort, etc.

(B) Background of how esports has developed in overseas countries

Prior to starting the discussion on domestic esports, we thought it would be effective to conduct research on the background of how esports have developed in foreign countries where discussions and examinations regarding esports has been taken. Therefore, documentary search and interview was conducted for U.S., Korea, E.U. and China, which advances in the dissemination of esports. As for the interview, information was gathered efficiently through phone call or email from 2 or more people involved in esports from each country / regional, and a local interview if necessary.

For each country / region, research was conducted by perspectives listed below. In addition, research on the business environment surrounding esports (population change in each country / region, state of network infrastructure, technological innovation and societal implementation status of devices, involvement of the government for regulation and promotion) will be conducted.

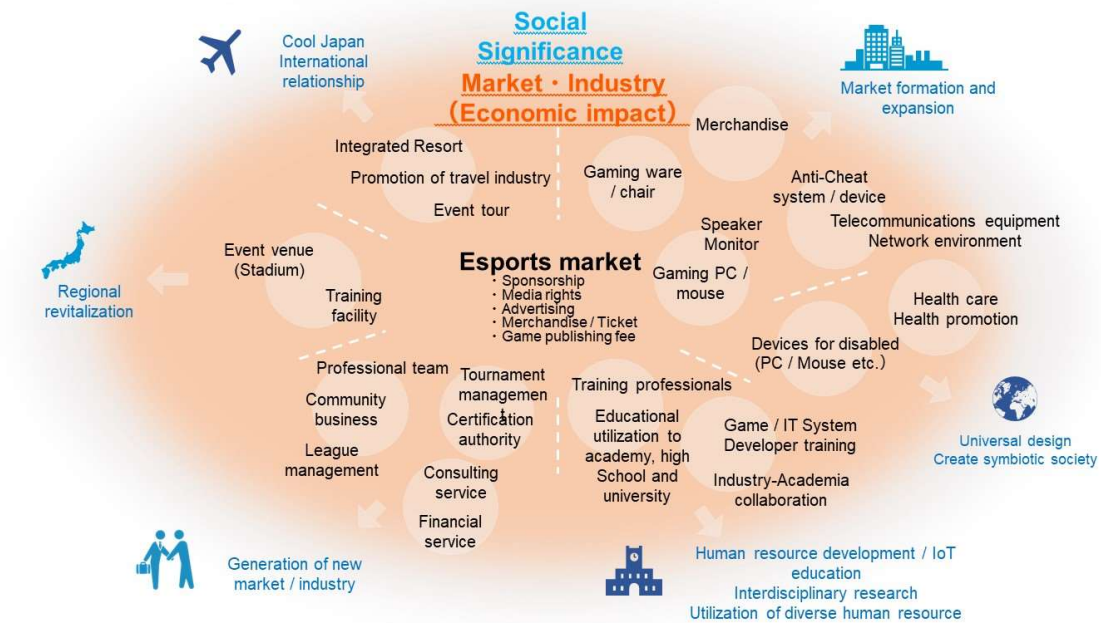
- Background of how esports and its surrounding fields have developed
- Guidelines for quality assurance of esports competitions, formation of unified organizations
- Relationship between the operator of the esports competition and the competition participants (players)
- Status of government involvement in policies

(2) Streamlining and discussing the social significance of esports based on the current efforts taken in Japan, challenges, future perspectives and other issues with such significance.

Based on above (1), streamlining and discussing the domestic esports based on the current efforts, challenges, future perspectives and other issues with such significance, and understand the implications.

The results obtained in (1) and (2) will be widely announced in the future to promote the dissemination and awareness of esports.

- Esports is one aspect of implementing the fusion of cyber space and physical space to the society. Economic impact to various peripheral markets, industries and social significance can be expected from esports.



Source : <https://www.meti.go.jp/press/2019/08/20190830001/20190830001-1.pdf>

Figure 1 The economic impact and social significance of esports

Based on the above arrangement, discussions were conducted within the inaugurated IC. Concerning the broad industries and markets field which esports may have influence on, we had recognized the necessity of wide range of experts to be participating as the members of the IC and joining the discussion. Therefore, 16 members including esports experts, and companies or organizations which in the future may be included as the esports industry field due to the expansion of esports industry (which includes: game developer, event organizer, community member / player, market participants from related device manufacture / financial service / tourism / media / etc., local government, legal practitioner, participants of education / welfare) were commissioned to the IC. (Chart 1)

JeSU, together with KPMG Consulting, the subcontractor of this project, served as a bureau of the IC. The discussion was held five times starting from September 2019 to February 2020 in Tokyo. (Table 2).

The discussions, documents and agendas were open to the public.

Chart 1 Members of the IC

Name	Organization
Anjo Kenichiro	Ph.D, Technical Sales Manager, Intel Japan K.K.
Kato Takahiro	Assistant Manager, Tokushima Prefectural Government (President, Taskforce for the promotion of esports in Tokushima Prefecture)
Daisuke Kobayashi	Producer of TV show “eGG”, Nippon TV
Masaru Sugiyama	Vice President, Global Investment Research, Goldman Sachs Japan Co., Ltd.
Haruhiko Takai	Domestic and Inbound Travel Executive Division, Japan Association of Travel Agents
Tomohiro Takagi	Partner, Nishimura & Asahi
Yoshio Takahashi	Associate Professor, Faculty of Health and Sport Sciences, University of Tsukuba
Eichi Tanaka	Occupational Therapist, Yakumo National Hospital
Kana Tani	Professional Player (Tanukana)
Hajime Taniguchi	Professional Player (Tokido)
Naonobu Tahara	Producer Lead of C4LAN
Yoichi Tomori	Representative Director, XENOS Co., Ltd. (SCARZ) / Owner, Professional esports Team SCARZ
Fusuke Toyota	Representative, Gaming Community Network
Ichiya Nakamura [Chair]	President, iUniversity
Junichi Matsumoto	CEO, JCG Co., Ltd.
Yasuyuki Yamaji	Secretary General, Computer Entertainment Supplier's Association (CESA)

Chart 2 Outline of the discussion by IC

	Date	The main topics of discussion
Discussion Day 1	September 24 ,2019 (Tue.) 14:00～16:00	<ul style="list-style-type: none"> • Purpose of the IC / About the discussion topics • Research of the market scale • Free discussion
Discussion Day 2	October 29, 2019 (Tue.) 13:00～15:00	<ul style="list-style-type: none"> • Further discussion topics • Precondition for the research and the growth of esports market scale
Discussion Day 3	December 10, 2019 (Tue.) 15:00～17:00	<ul style="list-style-type: none"> • Setting the long-term goal of esports market scale • Proposal for the market growth • Confirmation of the theme for the discussion of social significance
Discussion Day 4	January 15, 2020 (Wed.) 13:00～15:00	<ul style="list-style-type: none"> • Confirmation on the long-term goal of esports market scale • Confirmation on the proposal for the growth of esports market • Proposal related to social significance
Discussion Day 5	February 18, 2020 (Tue.) 15:00～17:00	<ul style="list-style-type: none"> • About the report • Further actions after the dismiss of the IC Summary of the IC

Chapter 2 Market scale research and discussion

In the following research and discussion, esports fan will be categorized as “Hardcore fan” and “Casual fan,” depending on the degree of involvement to Esports (Figure 2).

The definition of hardcore fan is: play or view esports for long hours and actively gathering esports related news. On the other hand, definition of casual fan is: play or view esports in low to medium frequency and is passive on gathering esports related information.

Hardcore fans are an important driving force for transitioning casual fans to hardcore fans. Hardcore fans will draw in other players into the game by inviting friends or sharing information to surroundings. Also, fans will take advantage of the opportunity to play and view esports by forming community such as amateur teams and hosting small events.

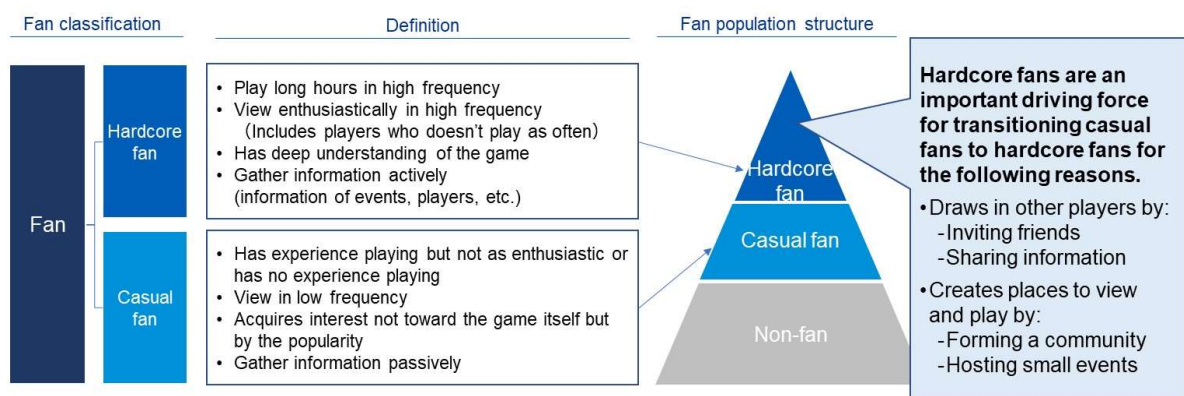


Figure 1 Fan Definition and Hardcore Fans

2-1. Definition of the esports market considering its growth

1) The stages of esports market growth.

The business field of esports will expand gradually as the esports market grows. In this report, businesses formed during the growing process after the commercialization phase will be the main target when estimating the market scale.

The growing process of the esports market can be categorized into 3 phases (starting, growing, maturing) (Figure 3). The starting and the early growing phase can be defined as the stage of culture formation, where the relationship of community formed by individual players and in-game friends are tightened through Lan parties or offline events held in PC Bang.

The growing phase and onwards can be defined as the stage of competition and commercialization. During the growing phase, more tournaments will be hosted by the community grew in the starting phase. The attractiveness of esports will attract more money to the market through sponsorship and broadcasting rights. As the degree of completion and attraction increase, more businesses such as facility, games and product development, and media services will emerge. And esports ecosystem will start circulating.

In the maturing phase, the underlying technologies of esports cultivated through esports' ability to attract customers, as well as its nature of competition will be utilized by other industries, which

will lead to economic ripple effects and innovation.

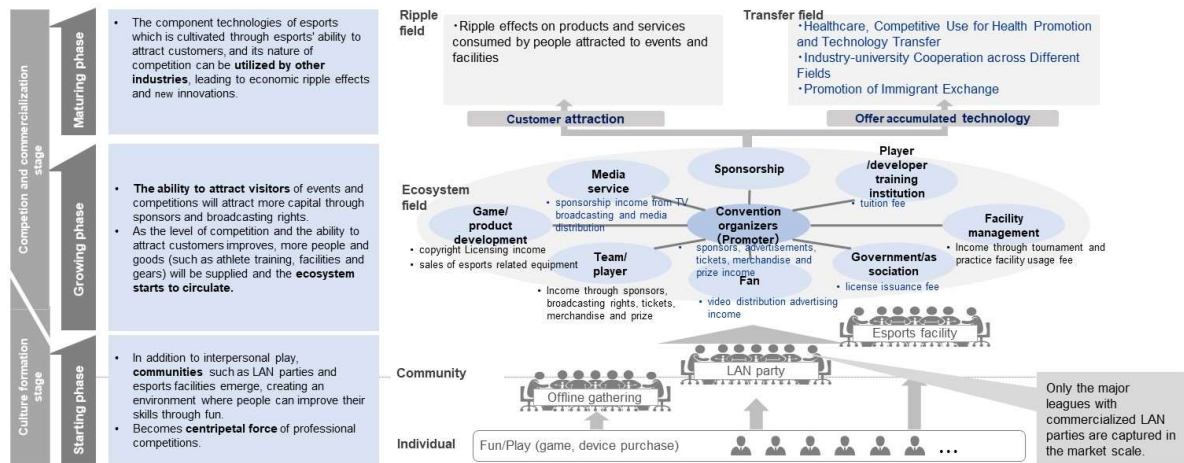


Figure 3 The evolutionary process of the esports market

2) The overall view of the business as an esports market

Esports market can be categorized as “ecosystem domain where event entertainment is placed as core element” and “ripple effect domain influenced from economic activity of ecosystem domain” (Figure 4). Ecosystem domain will be prioritized for estimating the market scale.

The “experience,” “watch,” and “support” framework defined by the Japan Sports Agency in the *Second Sports Basic Plan* is applied to the “ecosystem domain.”

Business for participants in esports competitions (teams / players) are included in "Experience" (sponsor / advertisement, tickets, merchandise, prize, social tipping, etc.).

Among the esports fans, "watch" is mainly targeted towards businesses (advertising, participation fee income) conducted by hardcore fan groups (streamers, LAN party organizers).

“Support” includes business (sponsor / advertisement, media rights, copyright license fee, facility usage fee, equipment sales, etc.) conducted by operators (event organizers, game publishers, event facility / training facility, related device manufacturers, etc.) which supports the competition or view of games.

"Ripple effect domain" includes businesses (food and beverage services, retail, information and communication, etc.) which utilizes the customer attraction of events.

Furthermore, "transfer domain" is located further out of the ripple effect domain. It includes business which have transferred the technology accumulated through esports (technology transfer in medical care, industry-academia collaboration across different fields, utilization of esports for finance / insurance business, etc.).

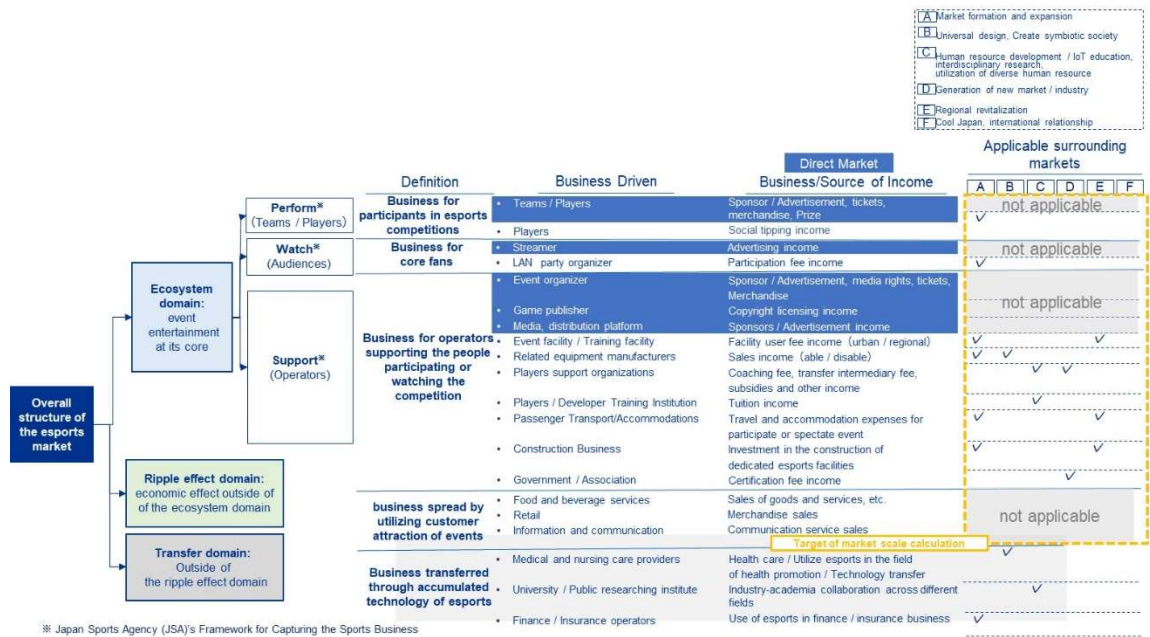


Figure 4 The overview of the business in the esports market

3) The flow of money within the esports market

The flow of money in esports market is explained below (Figure 5). The esports market can be broadly categorized as the ecosystem domain with event entertainment as its core element, and the direct market and ripple effect domain.

The blue squares within the ecosystem domain and the direct market represents the market players, and the arrows represent the flow of money between players.

The red arrow indicates the flow of money for the items in the direct market, which are defined in the reports of Newzoo and KADOKAWA Game Linkage, and the dotted red arrow indicates the flow of funds contained in the direct market. The flow of funds contained in the direct market is separated to prevent double counting with items in the direct market. For example, tournament prize is basically contributed from sponsorship fees in Japan, and if both are included in the calculation, these sections will be double counted (and this trend is expected to continue for the next few years). Therefore, it is excluded from the calculation of the direct market.

The blue arrows represent the flow of money in the esports ecosystem domain.

Outside the ecosystem, the ripple effect domain is represented. The blue circle are examples of industries that benefit from the ripple effect.

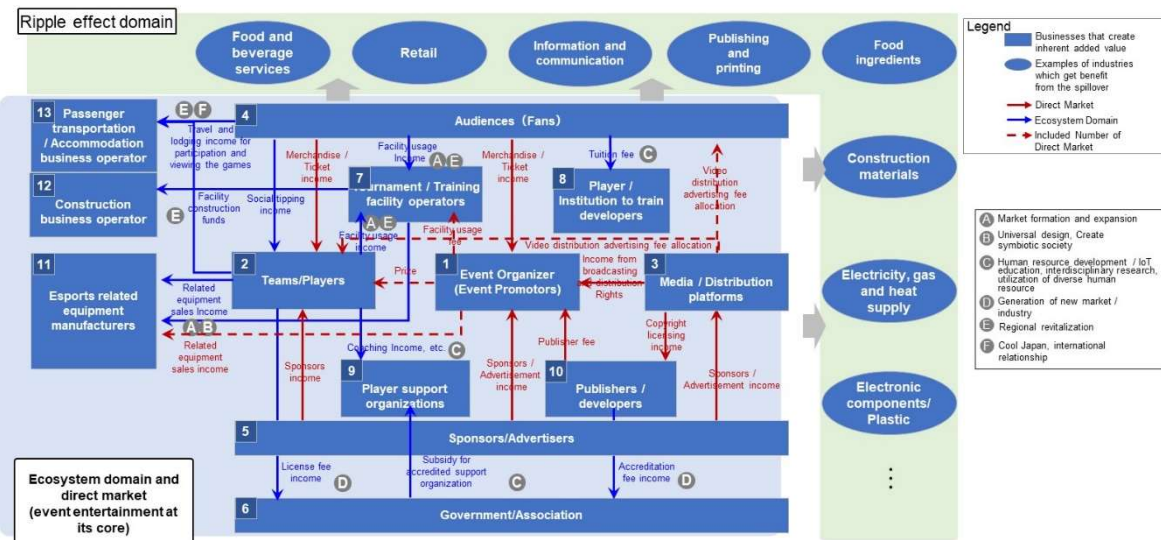


Figure 5 The capital flow within the esports market

Reference) Expansion of the esports surrounding market components

Based on the image of the expansion of the components that form the esports surrounding market, the market is classified into 6 fields (Figure 6).

The four layers (from direct market to transfer domain) are visualized in figure 4. There also are the classification mappings for the six fields.

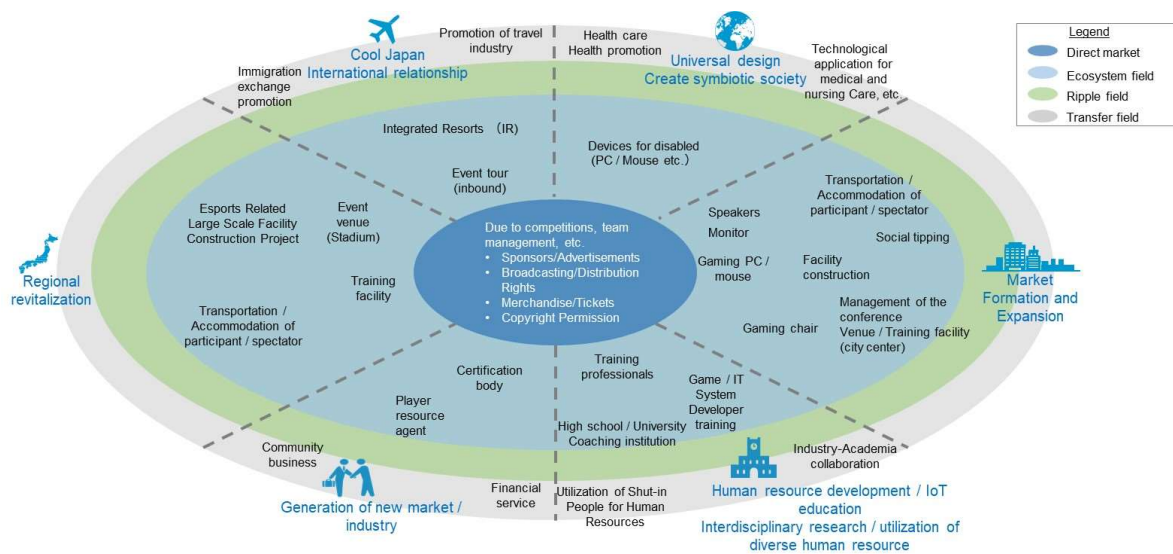


Figure 6 An image of the esports market expansion

2-2. Estimation of the market scale

1) The flow of money within the esports market: direct market

The flow of the money in the esports direct market is emphasized below (Figure 7). The red arrows indicate the flow of money for the items in the direct market, which are defined in the reports of Newzoo and KADOKAWA Game Linkage. The dotted black arrow indicates the flow

of funds contained in the direct market. The flow of funds contained in the direct market is separated to prevent double counting with items in the direct market.

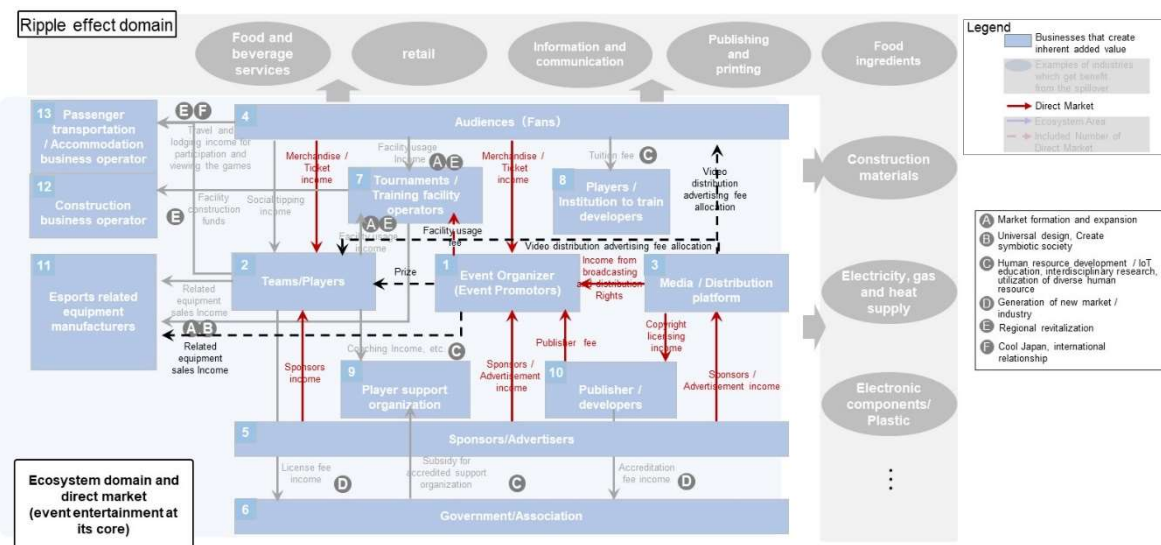


Figure 7 The capital flow within the esports market : direct market

2) Forecast of the business scale in the direct market

Japan's direct market is expected to reach 9.1 billion yen by 2022 (Figure 8). The value reported by KADOKAWA Game Linkage is used here.¹

2018 is the actual value and 2019 is the estimated value. CAGR from 2018 to 2022 is 20%.

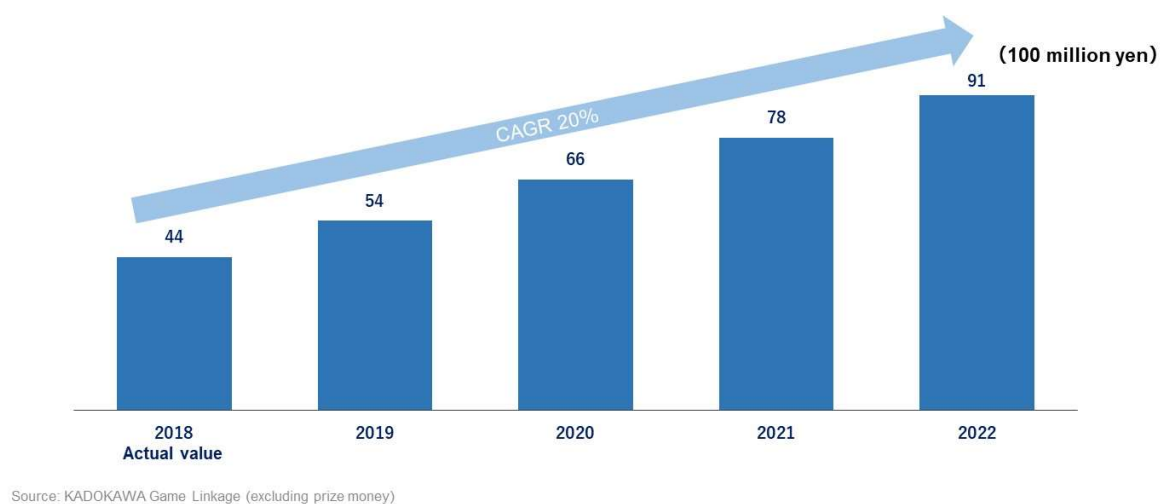


Figure 8 Forecast of the Japanese esports direct market scale

¹ The value of Newzoo used in this foreign research does not include prize money, therefore the prize money was excluded from the value of KADOKAWA Game Linkage to equalize the condition.

3) The flow of money in the esports market: ecosystem

The flow of the money in the ecosystem domain is emphasized below (Figure 9). The blue arrow indicates the flow of money within the ecosystem flow.

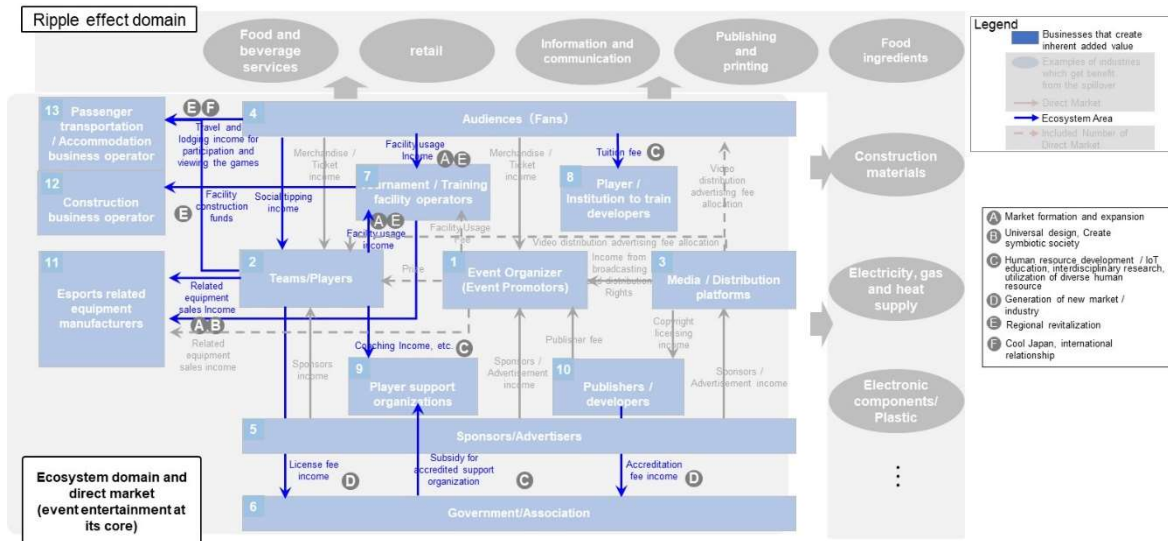


Figure 9 The capital flow within the ecosystem

4) Summary of ecosystem market scale estimation logic

The estimation of the market scale of the ecosystem domain was roughly estimated based on the business elements captured in the flow of money in the market.

In this report, there are two major logics used to calculate the ecosystem domain (Chart 3).

The first method for estimation is by multiplying "sales per economic entity or per economic transaction" with "the number of cases." If the sales figures are not available in other reports, they are calculated independently and multiplied by the number of players (number of cases). For example, esports related equipment manufacturer's income is calculated by the purchase amount per player multiplied by the number of players.

The second method is by multiplying "the market scale of similar foreign market" with "esports population in Japan / esports population in foreign country." For example, the social tipping income is estimated by multiplying the ratio of the esports viewers in Japan and U.S. with the social tipping market scale of U.S. Furthermore, when estimating the social tipping market scale in Japan, ratio of U.S. online population and esports viewer is multiplied. The reason U.S. esports viewer / U.S. online population is multiplied is because the usage of social tipping is not just limited to esports, it is also utilized in online streaming in general.

Chart 3 Summary of ecosystem market scale estimation logic

	Estimation logic	Examples
1	$\begin{array}{c} \text{Sales per economic entity} \\ \text{or} \\ \text{per economic transaction} \\ \text{(calculated in stacked form when necessary)} \end{array} \times \text{Number of cases}$	<ul style="list-style-type: none"> Income from event facilities / training facilities (Income per facility × Number of facilities) Income from related equipment manufacturers (Price purchased per player × Players)
2	$\text{Market scale of similar foreign market} \times \frac{\text{Japan esports population}}{\text{Overseas esports population}}$	<ul style="list-style-type: none"> Streamer Income from Social Tipping (Social tipping market in U.S. × U.S. esports viewers/ U.S. online population × Japan esports viewers/U.S. esports viewers)

5) Details of ecosystem market scale estimation logic

Below is the list of detailed estimation logic for each market players in the ecosystem domain (Chart 4). The estimation pattern (2) explained in the preceding clause is utilized only for the social tipping market, and the others are all estimated by estimation pattern (1).

Chart 4 Details of ecosystem market scale estimation logic

Business Description	Trial Pattern	How to Estimate Esports-related Sales	Examples of Business Players
Event / Training facility	(1)	Revenue per facility × Number of facilities	LFS Ikebukuro, Makuhari Messe
Related equipment	(1)	Annual spending per capita × Number of purchasers ※Estimated by PC gamer, Console gamer, Mobile gamer	Manufacturers of Gaming PC, keyboard, mouse, console, controller, chair
Player support	(1)	Number of domestic esports teams × Coach usage rate × Coach's salary	Training institution for professional teams
Esports player / Practitioner training	(1)	Annual school fees × Number of students × Number of schools	Esports College (training school for professional players, commentators, analysts, event staff, game planners, etc.)
Transportation / Accommodation business	(1)	Travel spending per capita × Number of event visitors × Ratio of visitors from out of town	Trains, airplanes, hotels and integrated resorts
Construction business	(1)	Construction cost per square meter × Construction surface area	Contractors of the esports specialized facilities
Government/Association (accreditation organization, etc.)	(1)	License Issuance Fee × Number of License issue per Year	JeSU
Online streaming by players	(2)	Overseas social tipping market × (Overseas esports viewers / Overseas online population) × (Domestic esports viewers / Overseas esports viewers)	Esports fan, Professional players

Estimation pattern (1) : Sales per economic entity or per economic transaction x Number of units
Estimation pattern (2) : Market scale of similar overseas market x (Japan's eSports Population / Overseas esports population)

6) Market scale estimation result of the ecosystem domain

As a result of the estimation, the market scale of ecosystem domain in 2018 is estimated to be 11.2 billion yen, around 2.5 times larger than the esports direct market, and the total esports market estimated to be 15.6 billion yen. (Figure 10).

The pie chart on the left represents the composition ratio of the six areas of social significance, with market formation being the highest. The pie chart on the right is the breakdown by each business, with esports related equipment being the largest. Console in esports related equipment category includes the sales from software purchase.

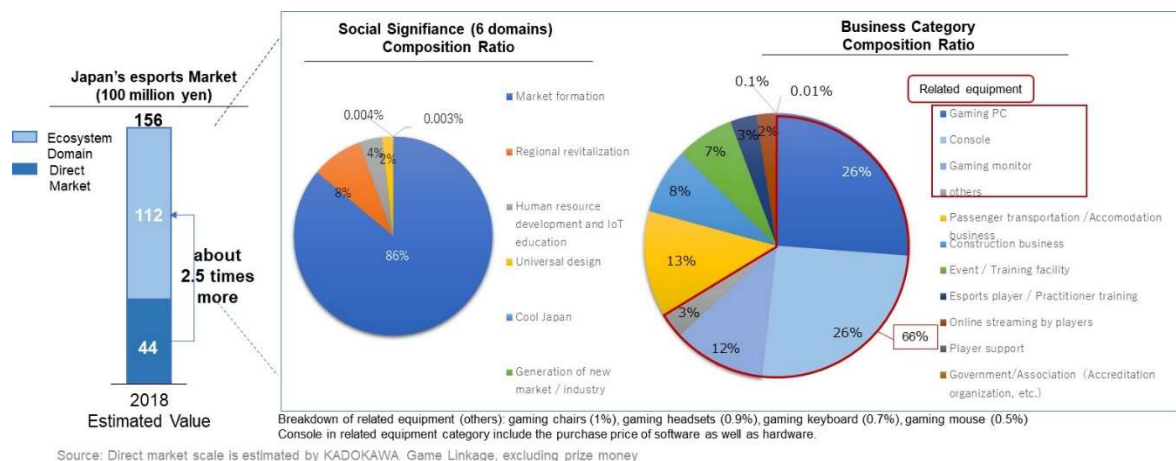


Figure 10 Market scale estimation result of the ecosystem domain

Reference) Breakdown of domestic direct market and the ecosystem domain

As a reference, breakdown of the direct market and the ecosystem domain is estimated. (Figure 11). The flow of money in the current domestic esports market is dominated by sponsors / advertisement and esports related devices.

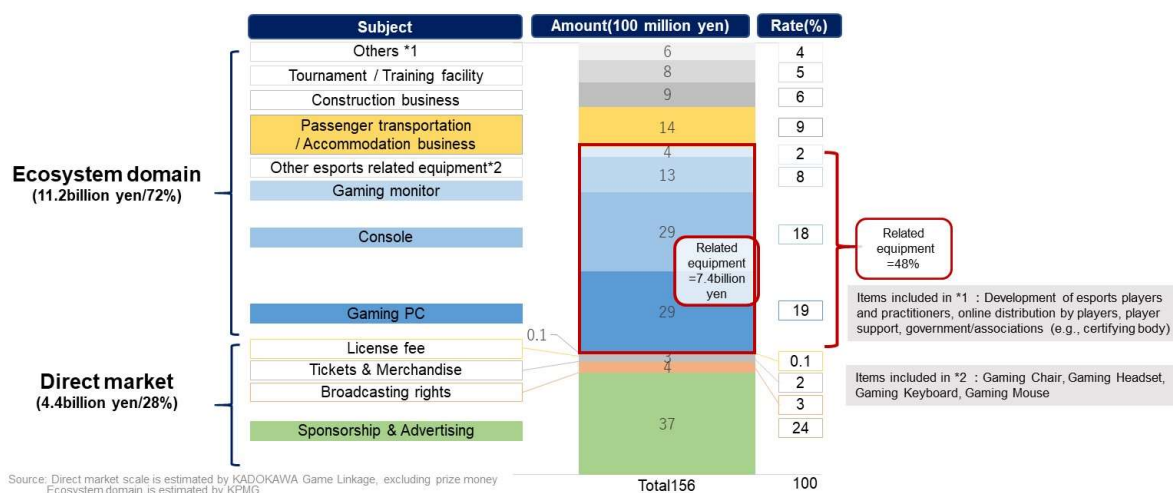


Figure 11 Breakdown of domestic direct market and the ecosystem domain (2018)

Reference) Figure 12 Flow of money in the domestic esports market : 2018

The largest flow of money within direct market and ecosystem domain represented in Figure 5 is highlighted below. (Figure 12).

Green is sponsor / advertising expenses of 3.7 billion yen, blue is related equipment of 7.4 billion yen, and yellow is passenger transportation/accommodation business of 1.4 billion yen.

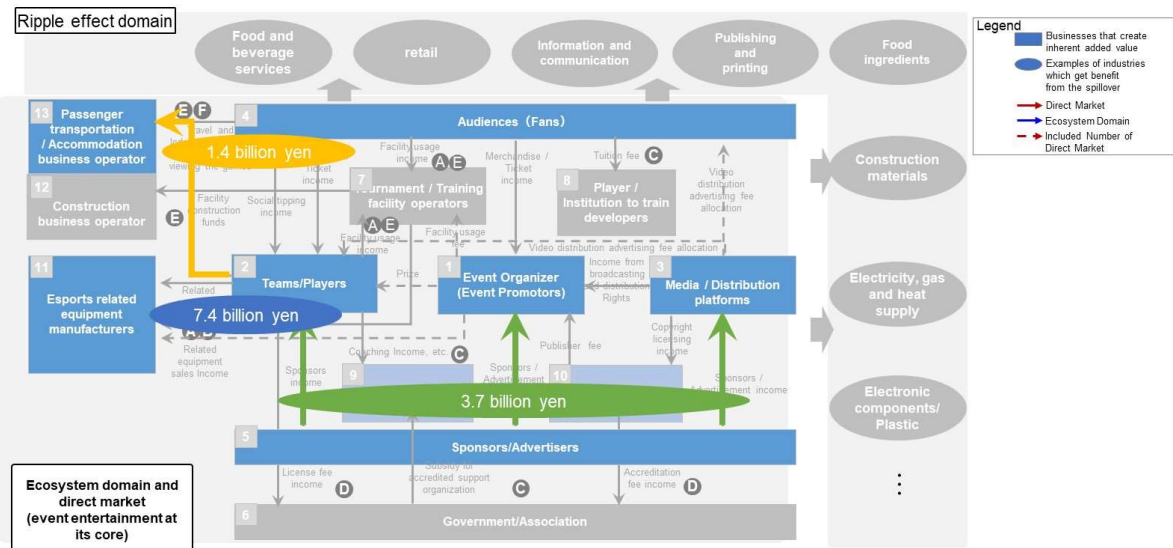


Figure 12 The capital flow in the domestic esports market (2018)

7) Relationship between market scale and number of fans in the direct market and ecosystem domain

90% of the revenues that make up the esports' direct market and ecosystem domain can be expected to grow in proportion to the increase in the number of esports fans (Figure 13). In the direct market, an increase in the number of fans is expected to have a direct impact, except for copyright licensing revenue. Ecosystem domain will also increase its scale as the number of fans increases, which will lead to the increase of people who purchase related devices or visit tournament and arrange accommodation.

From the above, it can be said that the number of fans is an important driver in the growth of both the direct market and the ecosystem domain for esports.

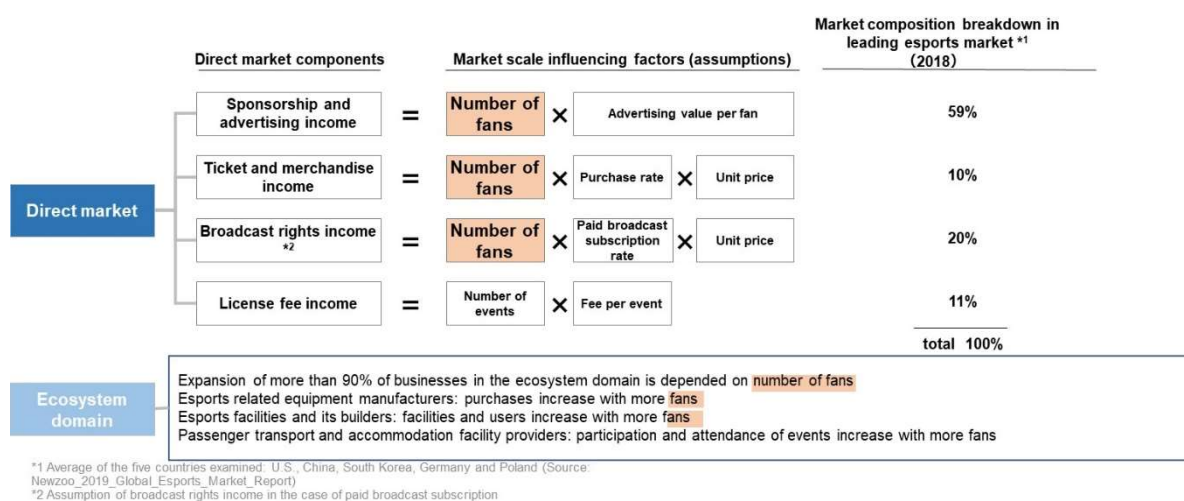


Figure 13 Relationship between market scale and the number of fans in the direct market and ecosystem domain

2-3. Long term market scale goal

1) The estimation method of the direct market in long term

If the Japanese esports ecosystem domain grows at the same rate as the direct market, the market scale of the entire ecosystem in 2022 can be estimated to reach 32 billion yen. (Figure 14).

In order to set the market scale goal of esports, comparison of goal of the number of fans as well as “value per capita” (calculated by dividing the market size by the number of fans) with other domestic sports and foreign esports market will be necessary. Therefore, the long term goal of the market scale will fluctuate depending on where number of fans value per capita is set to.

As for reference, number of fans in 2018 is 382 million, market scale is 4.4 billion yen, and value per capita is 1,150 yen.

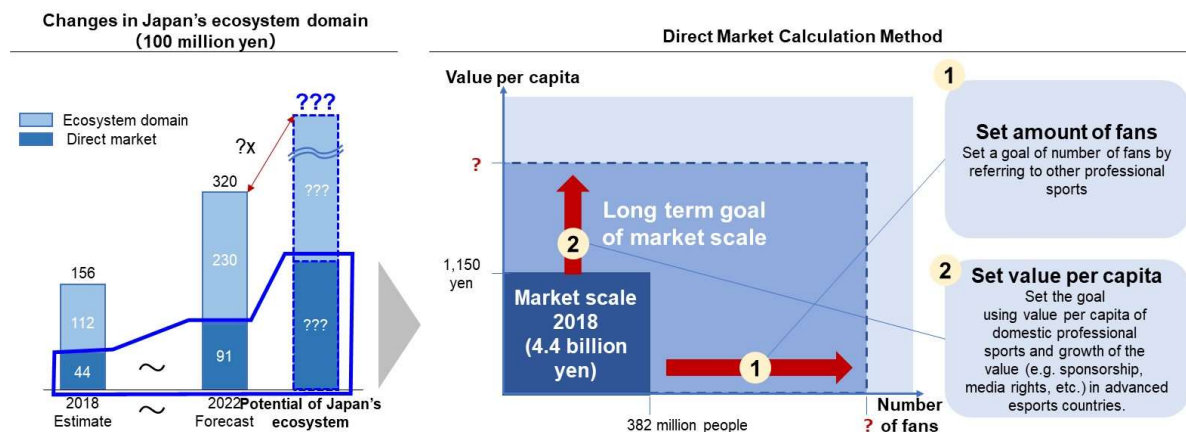


Figure 14 The estimation method of the direct market in the long term

2) Setting goal of fan amount and value per capita

In Figure 15, the left image shows the population of other sports, and the right image shows the growth forecast of value per capita in the advanced esports countries.

As for the springboard of discussion, fan amount has been set to 23 million to 26 million (if the esports popularity grew to the same level of Korea or the same spectator of professional baseball), and value per capita has been set to 2,700 yen (referred from the maximum growth rate of 2.3x within the advanced esports countries).

Within the breakdown of value per capita in U.S., media rights and sponsorship / advertisement is expected to have the highest growth. The reason for this is due to the rise of online streaming platforms, and sponsorship / advertisement from other industries joining the market.

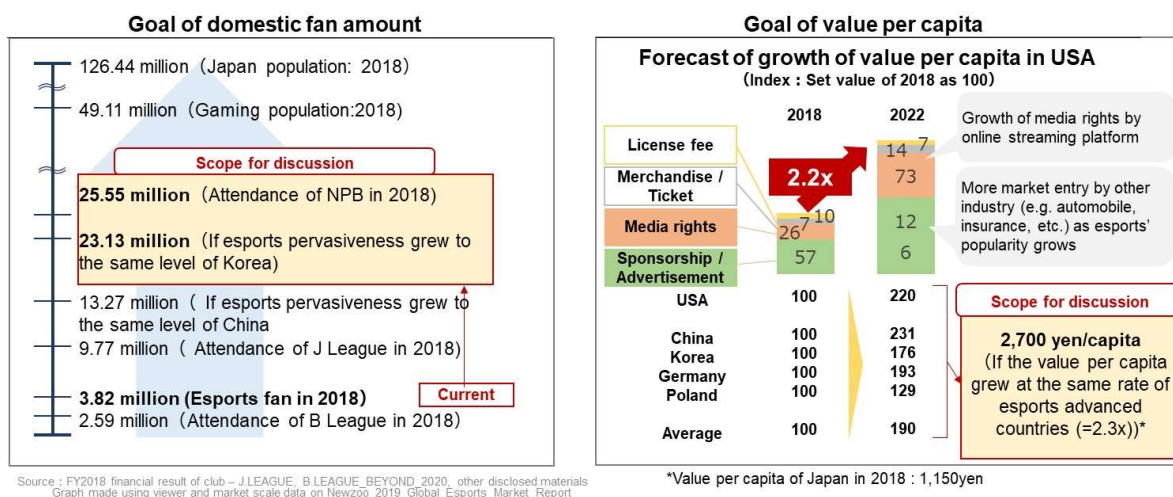


Figure 15 Setting goals for the number of fans and value per capita

3) Long term goal of the direct market

The IC examined the combination of the fan amount and value per capita for the springboard of discussion by referring to the market scale of domestic sports and the scale of esports market in advanced esports countries (Figure 16).

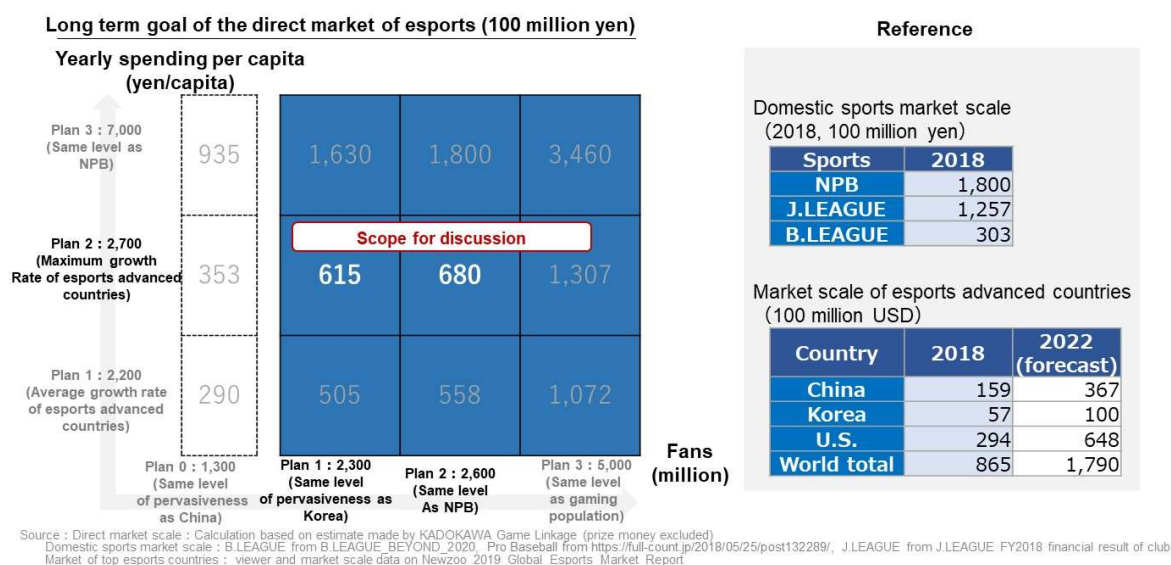
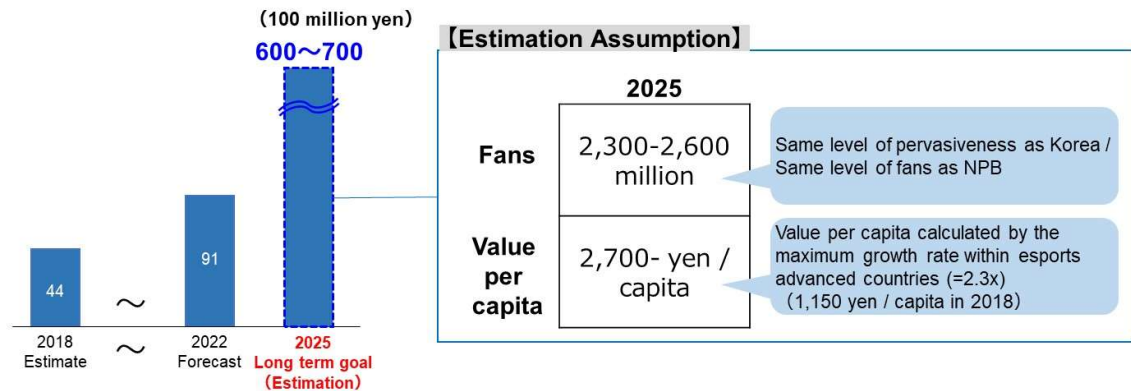


Figure 16 Long term goal of the direct market

As a result of the discussion, the long-term goal of the direct market was set to reach 60 to 70 billion yen by 2025 (Figure 17). Furthermore, IC has confirmed that the market scale can expand even after 2025, for example by utilizing the digital technology to establish new culture of supporting and viewing games, or enhancing the added value of esports itself will encourage the purchase of higher-priced content and items.



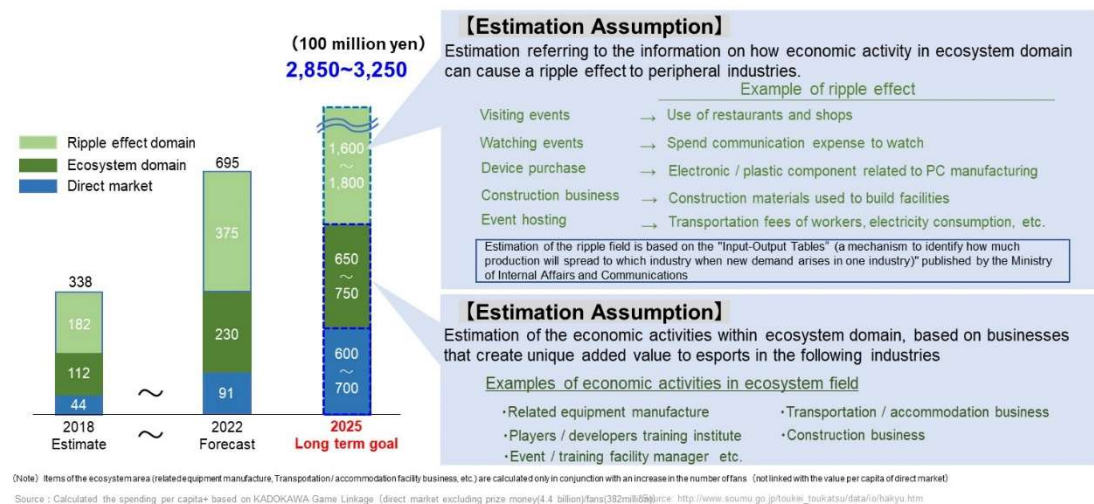
Source : Calculated the spending per capita based on KADOKAWA Game Linkage (direct market excluding prize money(4.4 billion)/fans(382million))

Figure 17 Forecast and the long term goal of Japanese esports direct market

4) Market scale including ecosystem domain and ripple effect domain (long term goal)

The overall long term goal of the market scale by 2025 (including economic activities in the ecosystem domain and economic effects on the ripple effect domain) has been set to reach 285 to 325 billion yen. (Figure 18)。

For the estimation of the ripple effect domain, "Input-Output Tables" published by the Ministry of Internal Affairs and Communications has been utilized. The direct market and ecosystem domains were categorized according to the items on the "Input-Output table" and applied for the estimation.



(Note) Items of the ecosystem area (related equipment manufacture, Transportation / accommodation facility business, etc.) are calculated only in conjunction with an increase in the number of fans (not linked with the value per capita of direct market)
Source : Calculated the spending per capita+ based on KADOKAWA Game Linkage (direct market excluding prize money(4.4 billion)/fans(382million))
http://www.sorum.go.jp/toukei_tousakasu/data/s/haiyu.htm

Figure 18 Forecast and long term goal of the Japanese esports market including the ripple effect domain

5) The industries within ripple effect domain which will receive effect from esports market

The development of the esports market will benefit industries in the ripple effect domain which is outside of the esports ecosystem. (Figure 19). There are wide varieties of industries within the ripple effect domain which will benefit from the expansion of the market.

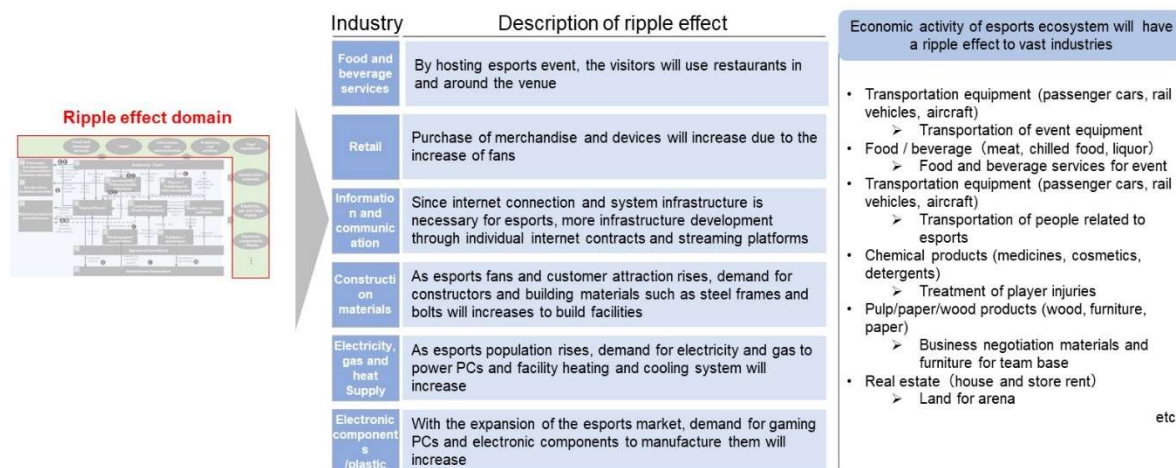


Figure 19 The industries within ripple effect domain influenced by the esports market

When observing the breakdown of the ripple effect domain, the economic activity seems to have the greatest impact on the personal service and professional and business service. (Figure 20). In addition, since the market for esports related devices in the ecosystem domain is large, the scale of information communication devices is also large in the ripple effect domain.

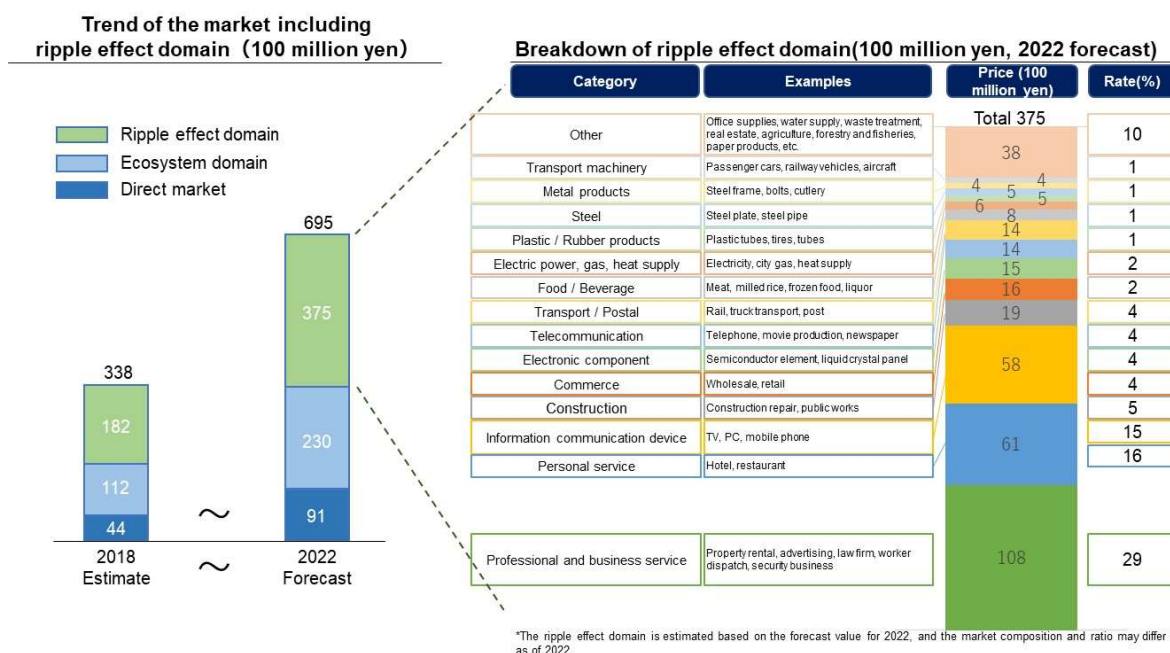


Figure 20 Breakdown of the ripple effect domain

Reference) Setting value per capita: comparison with other professional sports²

Below is the comparison of value per capita with other sports in Japan and other countries, for reference. (Figure 21). The current value per capita of esports is lower than that of other

² Esports は競技の総称であるため、各スポーツと 1 対 1 の比較はできないが、ここでは敢えて Esports として合算している。

professional sports in Japan and U.S.. Esports market has the potential of increasing the value per capita.

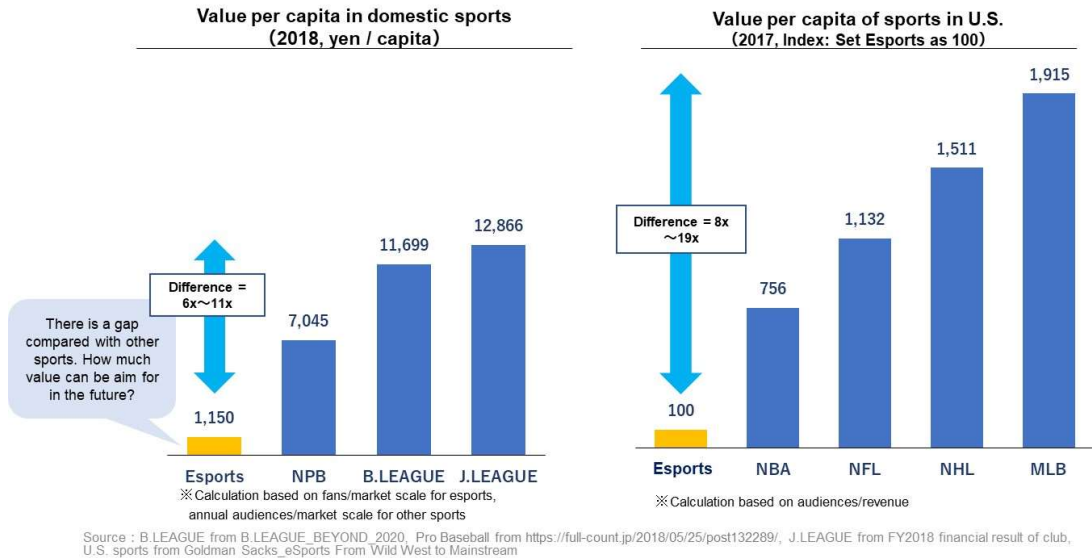


Figure 21 Setting value per capita : comparison with other professional sports

Supplement) Comparison of the market

When comparing major reports on esports, the values of the actual and forecast on esports market scale differs (Chart5). For the value of Japanese esports market, data presented by KADOKAWA Game Linkage, which has continuously grasped the changes of the market and has been adopted in the report published by Ministry of Internal Affairs and Communications, is utilized. For the foreign market, the data published by Newzoo, which extensively investigates the market size, number of viewers, etc. is utilized.

Chart 5 Comparison of the market

Market scale (100 million USD)						Actual value	
Country	Research institute	2017	2018	2019	2020	2021	2022
Japan	KADOKAWA Game Linkage ^{*1}	2.6	40.8	50.4	61.3	72.4	83.8
	Newzoo	4.9	7.1	8.2	9.3	10.4	11.8
	C. Barnes & Co.	50.6	57.8	64.8	72.9	-	-
China	Newzoo	121.7	158.8	210.3	267.0	318.8	367.3
	C. Barnes & Co.	116.8	153.9	203.4	267.3	-	-
Korea	Newzoo	41.9	56.8	67.2	79.9	89.9	99.8
	C. Barnes & Co.	14.2	18.0	22.4	28.0	-	-
USA	Newzoo	211.4	294.3	383.7	476.6	564.0	648.2
	C. Barnes & Co.	263.5	327.2	407.3	504.4	-	-
Poland	Newzoo	14.9	16.8	18.5	19.7	20.7	21.7
	C. Barnes & Co.	4.7	5.6	6.6	7.8	-	-
Germany	Newzoo	19.9	29.2	36.1	43.1	49.3	56.3
	C. Barnes & Co.	37.9	45.8	54.5	65.1	-	-
World total	Newzoo	655.3	865.1	1096.1	1339.8	1565.9	1789.9
	C. Barnes & Co.	807	994	1,217	1,490	-	-

*1 Calculation based on 1USD=108yen. Prize money (2017 : 80 million USD, 2018 onward : Around 8.9% of the market scale announced by KADOKAWA Game Linkage) excluded

Source : Newzoo_2019 Global Esports Market Report, KADOKAWA Game Linkage domestic esports market of Japan
Barnes Reports_2019 Global High Tech & Emerging Markets (Barnes is a U.S. based research company and has produced many reports on the emerging market)

2-4. Report on foreign country research

The result of foreign country research is summarized in the report (Attachment 1). The thesis is as below.

Chapter 1 Summary of esports advanced country research

1-1. The KSF(Key Success Factors) of esports market development in advanced esports countries

1-2. The growth pattern of the market in advanced esports countries

1-3. Summary of foreign research

Chapter 2 Information of each country

2-1. U.S.

2-2. China

2-3. Korea

2-4. Germany

2-5. Poland

Chapter 3 For the long term growth of the Japan esports market (proposal)

3-1. Preconditions for sustainable growth of Japan esports

The prerequisite of sustainable growth of esports market in Japan is the enhancing of the value of hardcore fans by increasing its number, which leads to the generation of revenue from event business itself. Furthermore, the continuous expansion and preservation of hardcore fans is necessary. (Figure 22).

((1)-1) During the starting phase, community is formed by individual players, in-game friends, social media relation and online events. Online gatherings in LAN parties and PC bangs are utilized as a means to strengthen the cohesion of the community. The continuation of the online gathering will lead to fans developing into a hardcore fan.

((1)-2) During the early growing phase, more events and tournaments will be held due to the backdrop of the hardcore fan base provided by the community. The attractiveness to customer will call in funds from sponsors and media, and at that point esports can be realized as an event business.

After the mid growing phase, ((2)-1) the event attraction will maintain and expand the number of hardcore fans. ((2)-2) The community will turn casual fans and developing fans to hardcore fans, and it will feed more fans to events and tournaments.

The repetition of this cycle will lead to a sustainable growth of esports.

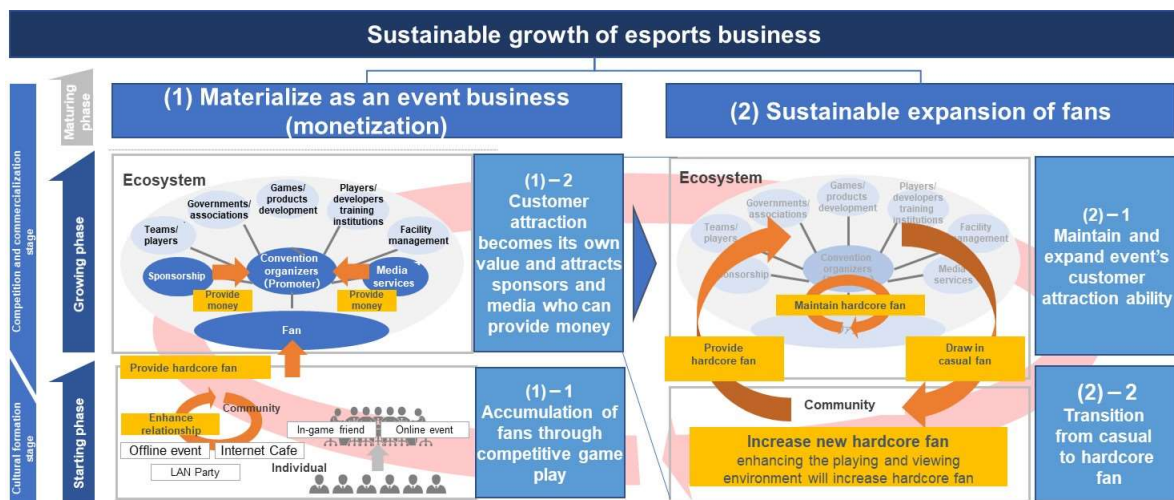


Figure 22 Preconditions for sustainable growth of Japanese esports

3-2. Course of plan for sustainable growth of Japan esports

After Analyzing the four stages required for the sustainable growth of esports explained in the previous section, the course of plan for the sustainable growth can be summarized to five points regarding the current state of Japan. (Figure23).

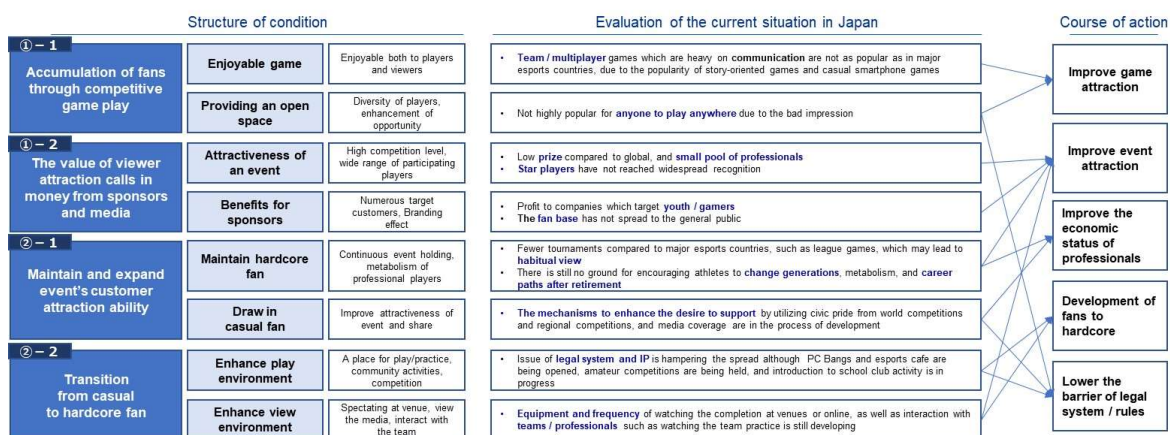


Figure 23 Course of plans for sustainable growth of Japanese esports

The five points of course of plan are "improve game attraction," "improve event attraction," "improve the economic status of professionals," "transform fans to hardcore," and "lower the barrier of legal system / rules" (Figure 24). The IC has discussed the above 5 points.

Course of plan	
A Improve game attraction	<ul style="list-style-type: none"> Developing titles which can express the high level of cognitive faculty and communication skills to viewers who have never played / viewed
B Improve event attraction	<ul style="list-style-type: none"> Cultivation of enthusiasm and desire to support by utilizing civic pride from regional league and producing star players Improvement of spectating / communication environment and event / league management expertise which are unique to esports events
C Improve the economic status of professionals	<ul style="list-style-type: none"> Ensuring sufficient income for professionals and expanding the pool of human resources aiming to become professional Arrangement of rules and ideas regarding prize money (The Premiums and Representations Act, crimes related to gambling, professional license system) to Securing a source of income from fans through merchandise, etc., and preparing a saucer after retirement
D Development of fans to hardcore	<ul style="list-style-type: none"> Enhancing contribution to fan by teams / players and fostering fan feelings through video distribution, etc. Involvement of surroundings through community activities such as practice sessions and grass competitions by existing hardcore fans
E Lower the barrier of legal system / rules	<ul style="list-style-type: none"> Dissemination of rules and guidelines relating to IP owned by publishers and clarification of procedures when operating esports-related facilities, holding events, and broadcasting media Facilitation of procedures for dealing with Entertainment Business Act and crimes related to gambling when operating facilities / hosting events

Figure 24 Course of action for the development of Japanese esports market

3-3. Proposal for the development of Japan esports market

The proposal that were discussed by IC are summarized in "Growth measure list" (Attachment 2). The proposal of measures against growth is classified by the five course of action which was explained in the previous section and clarified the subject which will play the central role in carrying out the proposal.

1)Improve game attraction

In this section, the following proposals and its concrete actions have been presented: select and focus on certain titles to create popularity and competitiveness, develop titles that can be played from any device without being tied to consoles or mobile devices in order to attract a large number of fans, develop necessary technology for esports to gain global competitiveness.

2)Improve event attraction

In this section, the following proposals and its concrete actions have been presented: increase the attractiveness of events by formalizing esports as an official sport in regional sports competitions, host esports world championships in Japan, hold themed competitions or competitions that are easy to watch in short amount of time, produce star players, construct international rules for tournament management.

3)Improve the economic status of professionals

In this section, the following proposals and its concrete actions have been presented: support the amateur players, improve the economic status of professional players by promoting "corporate teams" or applying a minimum annual salary in league.

4)Transform fans to hardcore

In this section, the following proposals and its concrete actions have been presented: necessity of "environment preparation" which will help fans to transform into hardcore fans, development of hardcore fans through esports related welfare presented by companies.

5)Lower the barriers of legal system / rules

In this section, the following proposal and its concrete actions have been presented: necessity of guidelines for facility management, esports event, and utilization / licensing of intellectual property (IP).

Chapter 4 Discussion on the social significance and its permeation (proposal)

4-1. Course of discussion on social significance

The IC has proceeded the discussion for social significance of esports regarding the "value of sports" defined in the "Second Basic Sports Plan" by the Japan Sports Agency (Figure 25), and "Sports and Sustainable Development (SDGs)" (Chart 6), which summarizes the roles of sports to achieve the common goals of the international community determined by the UN Summit, "Sustainable Development Goals (SDGs)."

~Sports can change and create the future Enjoy Sports, Enjoy Life ~



The “fun” and “joy” of sports are the core of the value of sports. If all people spontaneously engage in sports for self-fulfillment, and shine with the power of sports, positive and vibrant society and a world of strong bonds will be created.











1. **“Life” will be changed by sports!**
 Enjoy the maximum value of sports by “experiencing” sports.
 Everyone can enjoy the value by “experiencing,” “watching,” “supporting” sports.
Life can be fun, well-being, and vibrant by making sports part of the life.
2. **Change the “society” with sports!**
 People can contribute to the development of society by sharing the value of sports, and changing people's consciousness and behavior.
 Sports can contribute to the realization of a symbiotic society, a well-being and long-lived society, and revitalization of the economy and local communities.
3. **Connect with the “world” by sports!**
 Sports can contribute to the realization of “a world that respects diversity,” “a world that is sustainable and resistant to adversity,” and “a world that is clean and fair.”
4. **Create the “future” with sports!**
 With the 2020 Tokyo Olympic and Paralympic Games as an opportunity, we will develop a national movement that connects people through sports and promote the Olympic and Paralympic movements.
 During the period of this plan, the “sports participation population” will be expanded and the sports world will promote cooperation and collaboration with other fields to realize a “100 million sports society”.






Source : https://www.mext.go.jp/sports/content/1383656_002.pdf

Figure 2 The value of sports

Figure 2 Sport and the Sustainable Development Goals (SDGs)

	Goals	Role of the sport
	Goal 1. End poverty everywhere in all forms	Sports can be used as a means of teaching and practicing transferable skills for social, and living, that can lead to happiness, economic participation, productivity, and resilience.
	Goal 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	Sports programs associated with nutrition and agriculture can complement programs that tackle hunger and support education. Beneficiaries can be educated to be engaged in sustainable food production and balanced diets.

	<p>Goal 3. Ensure healthy lives and promote well-being for all at all ages</p>	<p>Exercise and sports are important elements of an active lifestyle and mental well-being. It can also help prevent risks such as non-communicable diseases and can serve as an educational tool for sexual and reproductive and other health issues.</p>
	<p>Goal 4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all</p>	<p>Physical education and sports activities can improve school enrollment and attendance, and even academic performance in the formal education system for school-aged children. Sports based programs offer educational opportunities and life skills that can be used beyond school, into the workplace and adult life.</p>
	<p>Goal 5. Achieve gender equality and empower all women and girls</p>	<p>Sports and sports-based community programs in particular, if designed inclusively for women and girls to develop skills necessary to become equal participants of society, can cause positive shifts in gender norms and promote gender equality.</p>
	<p>Goal 6. Ensure availability and sustainable management of water and sanitation for all</p>	<p>Sports can be an effective educational platform for disseminating messages on water sanitation requirements and management. If the activity and the intended outcome of sports based programs are interrelated to water-use-efficiency, this issue may improve</p>
	<p>Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all</p>	<p>By utilizing sports as a forum for discussion and promotion, sports programs and activities can support initiatives aiming at developing energy provision systems and ensuring access to energy.</p>
	<p>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p>	<p>The manufacturing, labor market and vocational training of the sports industry and businesses will foster increased employability for women and people with disabilities. Sports can generate enhanced overall community involvement, and it can motivate mobilization of the wider community and growth of economic activities associated with sports</p>
	<p>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p>	<p>Resilience and industrialization needs can be partially met by sports-centric efforts aimed at achieving relevant development goals, such as rebuilding sports and entertainment facilities after a natural disaster. Sports have been recognized and utilized as an innovative means of advancing development and peace, complementing other traditional tools for development.</p>
	<p>Goal 10. Reduce inequality within and among countries</p>	<p>Promotion of sports and the development through sports in developing countries contribute to narrow the gap between developing countries and developed countries. Due to its high popularity, sports is an appropriate tool for tackling the issue of inequality where communities and people are difficult to reach.</p>
	<p>Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable</p>	<p>Inclusion in sports and inclusion through sports is one of the main targets of "sports for development and peace". Easy-to-use sports facilities and services not only help achieve this goal, but can also serve as an example of good practice in adopting inclusive and resilient methods</p>
	<p>Goal 12. Ensure sustainable consumption and production patterns</p>	<p>Incorporating sustainable standards in the production and delivery of sport goods will help us adopt a broader and sustainable approach to consumption and production patterns in other industries. Messages and campaigns with this purpose can be disseminated through sports goods, services and events.</p>

	Goal 13. Take urgent action to combat climate change and its impacts	Sports activities, programs, and events commencing with large-scale sports events involving tourism, can raise awareness and knowledge of environmental sustainability, also it can proceed active engagement toward climate issues. In addition, by creating a sense of unity among disaster victims, acceleration of disaster recovery process is possible.
	Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	By utilizing the connection between sports activities and the ocean, such as water sports, advocating the conservation and sustainable use of marine resources will be possible.
	Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Sports can offer a platform for education and promotion regarding the preservation of terrestrial ecosystems. Sports in natural terrestrial settings can play an important role in ensuring the conservation and sustainable use of terrestrial ecosystems.
	Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	Sports can help rebuild post-conflict societies, uplift affected communities, and recover from war-related trauma. By sports supporting the rapprochement and integration of divided communities, sports will provide a powerful communication platform that can be used to promote a culture of peace, and foster dialogue and social cohesion.
	Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development	Sports can play a role as an effective means of making targeted development goals realistic and achieving concrete steps toward the implementation. Sports can catalyze, build and strengthen multi-stakeholder networks and partnerships for sustainable development and peace goals, involving and bringing together amateurs, professionals, governments, and private sector.

Source : https://www.unic.or.jp/news_press/features_backgrounders/18389/

4 – 2. Proposal for the implementation of social significance

The proposals discussed by the IC are summarized on “Social significance list” (Attachment 3).

1) Make life fun, well-being and vibrant

In this topic, the following proposal has been presented: promote esports through encouragement program, provide mental and physical care services to players for the development of an environment where players' well-being and sustainable engagement to esports can be attained, grant research on medical and educational effects of esports, and introduction of esports to education curriculum for the demonstration of its value.

2) Realization of a symbiotic society, and a well-being and long-lived society, as well as the revitalization of the economy and local communities.

In this topic, the following proposal has been presented: measures to encourage the participation of elderly and people with disabilities, holding a regional competition league, construct event facilities, referring to the fact that esports is a field that may contribute to the

creation of symbiotic society as well as "regional revitalization".

3) Realization of "a world that respects diversity," "a world that is sustainable and resistant to adversity," and "a world that is clean and fair."

In this topic, the following proposal has been presented: (with the opinion that esports can be a common language for the international exchange of the youth as a backdrop,) develop a esports themed tours and opportunity for international exchange, setting clear standards of requirements for the acquisition of long-term stay visa for the professional players based in Japan to promote international events in Japan.

4-3. The social significance of esports in SDGs perspective

The proposal for the realization of social significance by the IC and the coherence with the 17 goals of the SDGs is indicated in Chart 7. The IC conceive that the proposal fulfills 14 goals within the 17 goals of the SDGs.

To penetrate the diverse social significance of esports to the society, IC will aim for the implementation of the proposal.

Chart 7 Proposal for the social significance and the 17 goals of SDGs

			Goals of SDGs																		
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
Value of sports (Japan Sports Agency)	Make life fun, well-being and vibrant	A-1	Esports Incentive Program		○	△			○				△						△	○	
		A-2	Providing Mental and Physical Care Services			△					○										
		A-3	Funding for Evidence Research Topics				○													△	
		A-4	Introduction to the Educational Curriculum		○	△	○	◎	○			○		○						◎	
		A-5	Organizing a Boot Camp				○													△	
		A-6	Free Admission for Parents Competition				○														
	Contribute to the realization of a symbiotic society, and a well-being and long-lived society, as well as the revitalization of the economy and local communities	B-1	A Program to Create Life Satisfaction for the Elderly and Disabled		○		◎	○			△				△						
		B-2	Competition Volunteers		△		△													△	
		B-3	Development and Adoption of an Official Controller that can be Used in Competitions		△		○	○			○				○						
		B-4	Playoffs								○				○	△			△	○	
		B-5	Inter-City League		△		△		○			○	○		△	○	○		○	◎	
		B-6	Setting up Facilities for Local Competitions		△		△	○	△		△	◎	◎		◎	○	○			○	
		B-7	Development of Local Information Dissemination Centers		△		○	○	○			◎	◎	○	○	○					
	Contribute to the realization of "a world that respects diversity," "a world that is sustainable and resistant to adversity," and "a world that is clean	C-1	Sightseeing Tours		△						○	○	△		◎	○			○	◎	
		C-2	Relaxation of Visas for Athletes		○							△		△							
		C-3	Esports Animation and Film Adaptations		△							◎				○				△	◎
		C-4	Establishing a Place for International Exchange				△				△	○	◎		◎	○	○			○	○

※Detail of 1-17 is described in previous sector

Chapter 5 Recapitulation of the IC and the future considerations

5-1. The results of IC

Through the discussion by the IC, the following results were derived.

The IC has set the goal of the Japan esports direct market to reach 60 to 70 billion yen by 2025, as well as estimated the total market scale (including economic activities in the ecosystem domain and economic effects on the ripple effect domain) to reach 285 to 325 billion yen.

In addition, the preconditions essential to the long-term growth of the market were extracted by the IC and concrete action for each precondition were proposed.

Lastly, through the discussion of social significance, IC has confirmed the comprehension of social significance that esports can achieve and the results were summarized as a proposal.

5-2. Future consideration

Based on the discussion, the IC has proposed the necessity of further discussion for the following three topics.

- 1) The necessity of guidelines for the utilization and licensing of a game title (IP : intellectual property)

As described in chapter 2, if the esports market in Japan expands as targeted (direct market size increase by 15 times), the size and the frequency of esports event as well as the spectator and online viewer is expected to be increased. In addition, the increase of sponsors, the opportunity of exposure to the mass media, and income from the broadcasting right should lead the esports market to a virtuous cycle.

Therefore, as one of the efforts to improve the environment for hosting esports tournaments, the IC has examined the necessity of guidelines for "IP utilization / licensing".

Within the IC, such issues had been raised: the unclear procedure of obtaining the IP license, the complexity of the procedure leading to the loss of opportunity of holding an esports event or exposure to the mass media. For the improvement of the current circumstance, the establishment of IP utilization / license guideline and approval of unauthorized utilization of IP if within the boundaries of the guideline, was proposed as a solution.

On the other hand, there are concerns on legal issues that may occur even if the event organizer has no malicious intent. Esports in Japan is still in the preliminary phase, and the Japanese legislation surrounding esports is still in the midst of improving (including the Premiums and Representations Act, Penal Code on gambling, Entertainment Business Act, etc.). In addition, the size and composition of the organizers vary, and the awareness as well as the literacy regarding legal compliance differs depending on the organizers.

On the game publisher's perspective, for consumers to safely and securely enjoy the game, legal issues in event which utilize their IP must be avoided. Therefore, guaranteeing the soundness of the tournament will be necessary. In such circumstance, the approval of

unauthorized utilization of IP must be difficult. Therefore, establishing an institution which will monitor the "holding of clean esports event" was proposed by the IC as a realistic solution.

In the U.S., a country with advanced esports market, the development of environment for handling IPs for events/tournaments, broadcasting/streaming, and individual video uploads is being proceeded.

For the IP utilization / licensing, and guidelines, there is End User License Agreement (EULA). EULA allows developers to specify the IP usage conditions of their titles and the user will be able to use the IP within the condition. Regarding guidelines, some publishers have created "guidelines for IP usage" in multiple languages and posted it on their websites. The guideline is intended to promote the hosting of events and tournaments by clearly indicating borders of when IP license is necessary or not.

For the utilization of IP licensing in the area of broadcasting and online streaming, by referring to the common contract between the traditional sports in the U.S. (NFL, NBA, MLB, etc.) and the traditional media (ESPN, etc.), discussion on comprehensive contract between publishers and the media is proceeding. If the comprehensive contract allows the media to freely broadcast the match highlights and video clips, confirmation on IP usage will not be necessary each time.

In order to build an environment that is easier to hold esports event while ensuring the integrity of the event, and for Japan esports market to achieve the long term goal set by the IC, the discussion of IP utilization and license guideline must proceed based on the intention of the game publisher.

2) Establishing a foundation to transmit esports information for the realization of symbiotic society and regional revitalization

Advanced programs are implemented in various regions of Japan for the realization of a symbiotic society and regional revitalization, but limited numbers of people are aware of the programs. For the programs to be scaled out, the current situation must be improved. Therefore, the establishment of a foundation to receive and share esports information is necessary. The functions required by the foundation are: transmit information, connect related parties, collects knowledge about esports through a network, and contact point for anyone that can access. Furthermore, creation of new solutions, for realizing a symbiotic society and regional revitalization, from the foundation is desired.

JeSU is currently in the process of establishing regional branches, aiming to establish branches in all 47 prefectures in Japan. JeSU will proceed the establishment of regional branches and development of information network, to contribute to the realization of symbiotic society and regional revitalization.

For the preparation of Tokyo Olympics and Paralympics, venues equipped with wide screen monitors and high-speed communication environment are developed nationwide. Promoting the utilization of such venues to esports should be necessary.

By utilizing the new trend of esports, enhancement of the flow of people and funds to local areas and creating a community where everyone can play an active role shall be aimed.

3) Investigate educational values of esports and obtain evidence

As described in the previous section, the IC believes that the introduction of esports into educational scenes, such as club activities and classes, are necessary for further development of esports. Looking back in the history of the development of traditional sports in Japan, this must be considered.

The IC has discussed values which education and esports can mutually provide, referring to the personnel structure of esports ecosystem. (Figure 26).

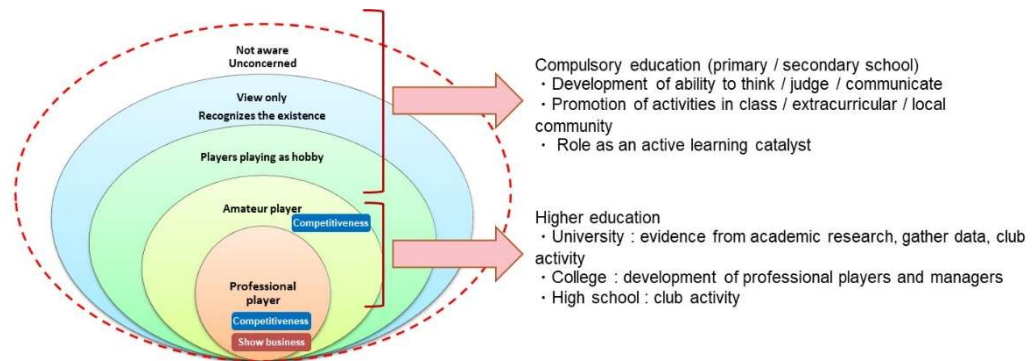


Figure 26 Personnel structures and educational needs / values of esports

In the compulsory education curriculum of primary and secondary school, promotion of esports as an extracurricular activity and activities in the local community is essential for the expansion of esports. In addition, for the justification of esports into classes, one needs to promote that esports is expected to support the development of ability to think, judge, and express in class activities.

Furthermore, the competitiveness and gamification elements of esports may be expected to play a role as a catalyst for active learning.

In higher education (high school, college, and university), esports can be adopted into club activity with an aim to produce professional players as well as introducing to classes for the development of human resource which will contribute to the expansion of the market.

In high schools, efforts to introduce esports into educational scene are spreading. Yokosuka City is collaborating with four IT company and is renting high performance PCs to high schools within the city without compensation. The aim of this program is to foster esports competitors by supporting the establishment of clubs and vitalize the local community by attracting and hosting esports events³. Noboru Tanimoto, the principle of Fukusho High School which is said to be the first public high school which has introduced esports into club activities, has stated that "communication and teamwork skills can be obtained" by esports and introduction of esports into educational scene has created a synergistic effect such as improvement in academic achievement as well as the establishment of independence.⁴

³ <https://www.tokyo-np.co.jp/article/kanagawa/list/201912/CK2019120502000120.html>

⁴ <https://www.gamespark.jp/article/2019/09/20/93203.html>

It is also important to obtain evidence of educational effects of esports and its impact on traditional sports by promoting academic research on esports at universities. Especially when introducing esports to classes, setting the necessary qualifications and skill sets of teachers will be necessary and prerequisite empirical research will be essential.

In order to promote such efforts, collaboration with various of schools and school personnel, researchers involved in the field of education, relative administrative agencies will be necessary. The IC will proceed with the investigation of educational value of esports and obtain evidence, to promote the introduction of esports to various education scene.

5-3. Necessary actions

IC has summarized the essential actions for each market player, for mid to long-term growth of Japan's esports market and the establishment of social significance.

1) Esports industry association

The following are the roles expected from the industry group: prepare the environment for the healthy and multilateral development of esports by establishing guidelines and rules for facility management and hosting tournament events, expand the scope of esports by hosting global esports event and seminars/courses by professional players to increase the opportunities for top players to play active role as well as interact with fans. The establishment of guidelines and regulations will not only help standardize the implementation of esports, but it will lower the barrier of fans entering esports. Therefore, it is an important field where the esports industry association should focus on.

In addition, the development of information sharing touchpoints and places for international exchange will also be important efforts for the realization of a symbiotic society and regional revitalization. At that time, for example, issuing the "Japan Annual eSports Report" could be a solution.

2) Esports industrial field

The industrial field is expected to contribute to increase the attraction of esports and the further market growth. The following measurement are examples of actions which can be taken: development of esports titles which can be played on multiple devices, adoption of esports as an official sport in regional sports competitions and hosting themed competitions.

In addition, the development of official tournament controller, holding a regional competition league, and tours based on events are effective for realizing a symbiotic society and a diverse society.

3) Education / Research institute

Education and research institutes are expected to make efforts to permeate the social significance of esports by such measures: introduction to educational curriculum, development

of esports promotion programs, and grants to fund research themes. In particular, obtaining the effect of adopting esports to educational scene is highly expected in the future research.

4) Government office

Government office is expected to support the activities of market players such as trade associations, industrial fields, and education/research institutes, especially from the aspect of legal system development.

In addition to domestic issues such as the Entertainment Business Act, the following examples of efforts are expected for the multifaceted development of Japanese esports: maintain the quality assurance level necessary for the operation of official esports event, construction and dissemination of the international rules to gain a competitive advantage from other countries.

5) Local government

Measurement from the perspective of regional transmission, and local revitalization through esports is expected as the role of local government. The local government will be able to provide services optimal to each area, which will lead to the revitalization of the local community. Adapting esports into local events, the corporation of local businesses and residents on esports, and utilizing esports on welfare, education, and tourist attraction will be the examples of measures.

6) Players

The esports players are acquainted with the game title. In particular, professional esports players, through their game play, are expected to embody the social significance of esports by attracting the attention of stakeholders surrounding esports. They are also expected to attract esports fans as well as impart the attractiveness of esports through their statements supported by their competitive skills.

Chapter 6 Conclusion

Predictions of the future development of Japan's esports, which is currently at the starting stage, has been made during the discussion. The results suggest that the Japanese market could reach to a long-term target of 60 to 70 billion yen, which will be comparable to the size of the U.S. market which currently boasts the largest direct market in the world.

This was followed by a proposal for growth measures that would allow the market to grow beyond the forecast as well as for the social significance of esports to settle through the country and make esports take root as a widely-accepted culture.

What shape will esports in Japan and its society be when the measures and proposals are steadily implemented, and the long-term goals are achieved? ——。

—— *Year 2030. Japan has long since become one of the "advanced esports countries."*
The number of esports fans has grown to exceed 26 million, the same level of professional baseball.

There are now esports arenas in every prefecture in Japan. More than 10 facilities, which are capable of drawing more than 3,000 people, are hosting esports tournaments for various game titles every night. The level of professional teams and players competing there are all high level and succeed in the world. The event venue is crowded with young people queuing to purchase their favorite team's merchandise, parents and children, as well as foreign fans from abroad who have come to support the team. The amount of money spent by fans on tickets, merchandise, food and drink in a day is enough to buy a video game.

With the acceptance of 5G networks in the 2020s, esports competition can be viewed anytime and anywhere by using mobile devices and VR goggles. Results of league tournaments are reported on the TV news, and the center of conversation in workplace and school is, of course, esports. Many people are a casual esports players as well as esports fan who is attracted by the play of the professionals and affected by the outcome of the games. ——

—— *A video game company. The company is discussing business strategies for the production and sales of its upcoming major title. Over the past five years, media rights, merchandise sales and in-game advertising have become a major source of income for the gaming industry, with new company entering the various layers of esports market. Surveys have shown that more than half of users now decide which games to download after watching a live esports event. In the production of the new title, discussions about the perspective of each player, the ease of broadcasting, and new ways of expressing team introductions and sponsorship advertisements have taken place that have never been seen before in game production. ——*

—— *A regional city. The scope of esports has been expanded by the establishment of wholesome esports event management and the guidelines for the use of IP has led to an increase in the number of companies participating in broadcasting, advertising, and league management, and the increased use of esports in education. Events such as tournaments and social gatherings are also being actively held by educational institutions and local governments, which is promoting interaction between people of all ages and demographics and providing a great*

stimulus to children. In addition, the scope of PR measures has expanded to include not only the implementation of events and internet broadcasting, but also the appointment of esports players as ambassadors, which has contributed to raising awareness of each region and enhancing the activities of local residents.

With these characteristics, Japan's esports have been exported as a standardized package, and the Japanese entertainment industry has entered a new stage in its development. ——

—— A secondary school student in a local city. The summary of today's class is English conversation through esports. The students were challenged to chat with a team from foreign school and to speak with their teammates in English. At the end of the class, the students were assigned with homework to submit two tactical plans on how to break down the enemy's team.

During the school club activity, students practiced for the upcoming National Junior High School Esports Championship, but the controller didn't feel comfortable. They visited the local esports information center and the staff informed that a mechanical engineer who works at an esports practice facility in the next town would be able to fine-tune the controller for them. Esports training facilities can be found in any local city, where players can drop in after school or work. One of the most popular lessons for children to participate is an esports academy (juku) run by professional teams. It's a place to develop the next generation of players and a valuable source of income for the team. The dream of the student is to improve player skills and become a professional player. After the retirement of the career, professional player will teach at the academy and incubate future professional players.

The staff at the information center has gave advise of get some coaching from the mechanical engineer when asking for the adjustment of the controller. The mechanical engineer himself was a professional esports player with the same disability as I was but who was described as invincible. ——

Such a world does not seem to be a pipe dream. The IC envision a world where the spread and development of esports makes society more prosperous, communities more well-being, and people's lives more enjoyable and vibrant.

The IC will continue to focus on how the proposal will be implemented, how it will lead to the development of esports in Japan and the enrichment of the country, as well as continue to search for ways for esports to contribute to the growth and development of Japan and the world.