

Keen Fans Blaze a Trail in North Asia's Booming eSports Market

• Introduction | Key takeaways

01

Audience Snapshot

- A serious spectator sport largely driven by 18-34 year olds
- China: High penetration of eSports online viewership, driven by wide age-range of fans
- Japan: eSports online viewership is concentrated among 18-24 year old
- South Korea: 18-34 year olds drive eSports viewership

06

Viewing Preferences

- Growing popularity of watching online games through streaming video
- Streaming online gaming is very popular, especially in China and South Kore
- Growing live spectatorship
- Regular viewers of eSports are likely to watch for at least 2 hours
- Growing participation in eSports
- Extremely high awareness of all streaming sites

Device Choices

- Mobile devices are the device of choice for watching and playing eSports
- Video quality trumps sound quality

16

Game Preferences

- Shooter games gun down the competition
- League of Legends is popular in China and South Korea, but Street Fighter is preferred in Japan

17

Methodology

Introduction

Welcome to our report on "eSports Market Sizing: China, Japan and Korea", conducted by Kadence and sponsored by Akamai. This in-market sizing study aims to capture eSports spectatorship and participation, as well as the device and game genre participation rates.

The booming gaming industry in North Asia has turned the region into an eSports powerhouse, with millions participating in or watching gaming through online streaming.

Both a sports event and an entertainment, eSports has seen phenomenal growth in popularity among fans and users especially in China and South Korea - where gaming events frequently attract thousands of spectators and millions of livestream views.

China is leading the charge by dominating the global eSports market and staying ahead of the game in the areas of eSports infrastructure and venues. It is the second-biggest country after North America for eSports revenue, with estimated revenues of \$164 million in 2018 and a total eSports audience of 125 million.¹

China has notched another first by being home to the world's first purpose-built eSports stadium in Chongging that opened in December 2017.

South Korea is another global leader in the eSports space, having hosted many of the world's biggest tournaments, and has the distinction of being the first country in the world to recognize professional gamers as athletes.

While Japan's eSports market may not be as mature as those in China and South Korea, it is the fastest growing country in the East Asian region, with over 80% of survey respondents saying that they have only been following the sport for two years or less ². The growth of the eSports market has also been dampened by legal restrictions that have made it difficult for gaming competitions with sizeable prize money to be organized.

^{1 &}quot;2018 Global Esports Market Report." (https://newzoo.com/insights/articles/newzoo-global-esports-economy-will-reach-905-6-million-2018-brand-investment-grows-48/)
2 "The eSports Playbook: Asia" (http://www.nielsen.com/sg/en/insights/reports/2018/the-esports-playbook-asia-maximizing-investment-through-understanding-the-fans.html)trends-report.



What is eSports?

eSports are associated with different video game multiplayer online battle arena (MOBA) and card

Mary Meeker. The study found that millennials

2022 Asian Games and word on the street is that

3 "2017 Global Esports Market Report"

(https://newzoo.com/insights/articles/esports-revenues-will-reach-696-million-in-2017/)

4 "Mary Meeker's 2017 Internet Trends Report." page 140.
https://www.scribd.com/document/349976485/mary-meeker-s-2017-internet-trends-report.

Key Takeaways

- eSports viewership online has a high penetration, with ½ or 68% of the respondents from the North Asian countries of China, South Korea and Japan have been exposed to eSports online, and ½ being regular viewers of online eSports.
- eSports viewership is largely driven by those aged 18-34, with the 25-34 year olds being more likely to be regular eSports viewers.
- Males are more avid eSports spectators, with 73% of male respondents having viewed eSports online, compared to 63% of females.
- As many watch eSports regularly, North Asians collectively spend billions of hours streaming games each week.
- Regular eSports viewers are likely to spend at least 2 hours in each session.
- YY, Douyu and Youtube are the most popular video streaming sites for gaming in China, while YouTube, niconico, TwitCasting and afreeca are more popular in Japan and South Korea.
- Mobile devices are the preferred platform to watch and participate in eSports.
- The most popular eSports genres are: shooter, strategy and MOBA games.
- When it comes to streaming games online, the most important factors are: speed and video quality, with sound quality being the lowest priority.

Audience Snapshot

A serious spectator sport largely driven by 18-34 year olds

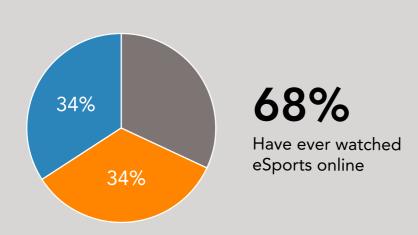
Like traditional sports, people can watch eSports in person at an arena, or remotely through a streaming service or television. However, eSports viewership tends to be significantly higher online, whereas traditional sports tend to be broadcast more on television.

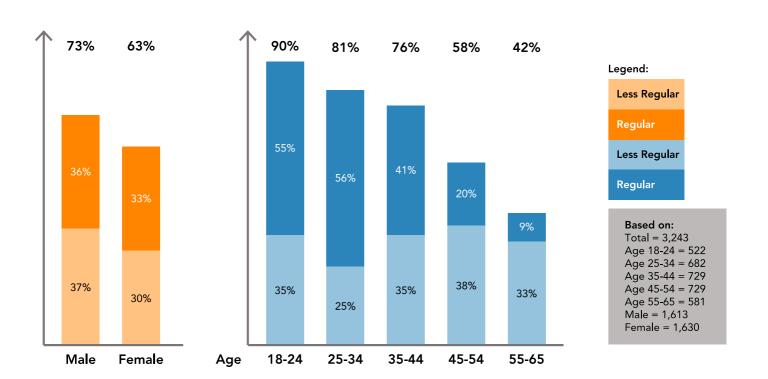
eSports viewership online has a high penetration, with ½ or 68% of the respondents from the North Asian countries of China, South Korea and Japan, having been exposed to it through the internet. Of these, ½ or 34% are regular viewers of eSports online.

Males are more avid eSports spectators, with 73% of male respondents having viewed eSports online, compared to 63% of females.

By age, eSports viewership is driven by 18-34 year olds, with those aged 25-34 being more likely to be regular eSports viewers.

eSports viewership online penetration



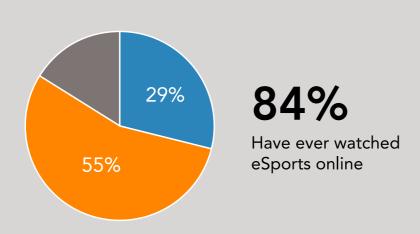


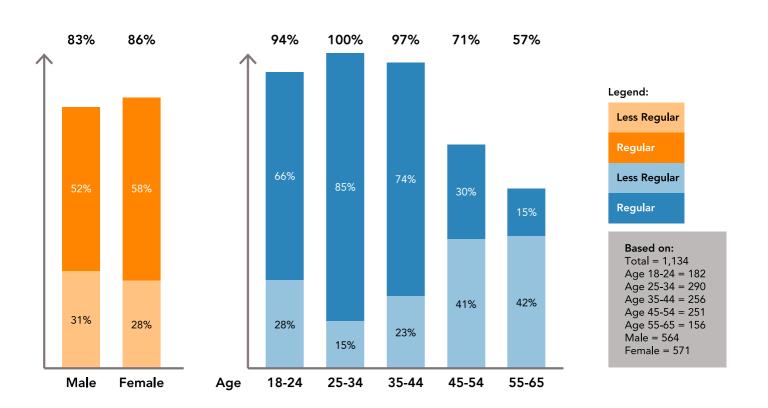
CHINA: High penetration of eSports online viewership, driven by wide age-range of fans

China has the most enthusiastic eSports players and fans. The country's eSports fans stand out for high penetration of online viewership, with 84% of respondents having watched eSports online.

This is driven not only by males (83% of male respondents), but also females (86% of female respondents), in contrast to the more dominant male eSports viewership in Japan and South Korea. In addition, those aged 25-34 have a higher exposure to eSports viewing online.

2018 China penetration rate of eSports online viewership





JAPAN: eSports online viewership is concentrated among 18-24 year olds

While Japan is a leading player in video games having created Super Nintendo and Sony's PlayStation, the gaming trailblazer has taken its time to embrace eSports. Also, the Japanese have traditionally preferred solo gaming, and that solitary preference is slowly changing to be more communal.

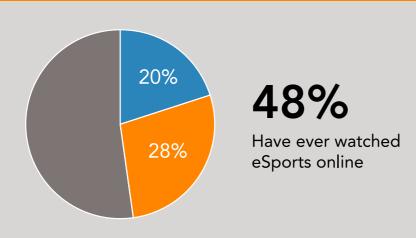
A push toward eSports is by the Japan Esports Union (JESU), which was recently formed to promote eSports in Japan by working to help the industry overcome some administrative and legal hurdles.

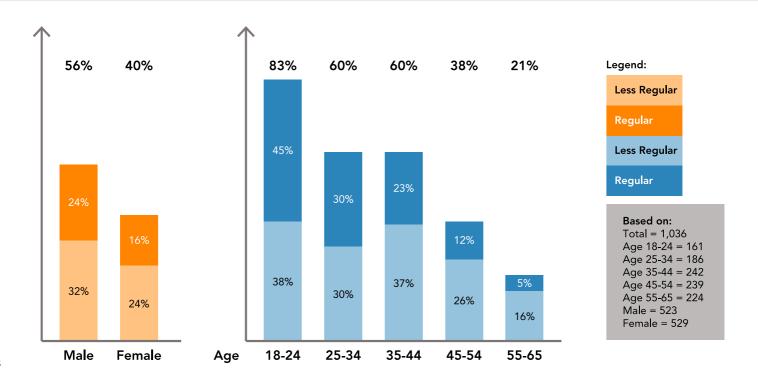
In terms of fan base, Japan's eSports online viewership is concentrated among the younger set - the 18-24 year olds, in contrast to China and South Korea's eSports fan base that spans a wider age range.

About half or 48% of survey respondents in Japan have watched eSports online, with males being more likely to be exposed to eSports. Some 56% of male respondents and 40% of female respondents have watched eSports online.

Watching regular gamers game online live has the highest proportion of regular viewers, something that 73% of respondents in Japan have done, compared to other forms of eSports viewership.

2018 Japan penetration rate of eSports online viewership





SOUTH KOREA: eSports online viewership is concentrated among 18-24 year olds

South Korea stands as a video gaming powerhouse, having hosted many of the biggest and richest competitive gaming events and where eSports gamers are treated with similar fame and recognition accorded to professional athletes.

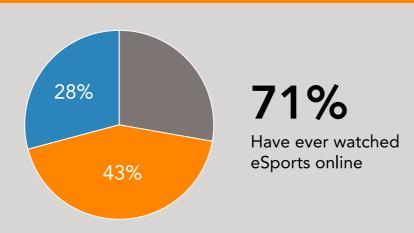
Propelled by an ultra-fast nation-wide broadband network and a vibrant internet culture, eSports has won a place in the hearts of South Koreans as a national pastime.

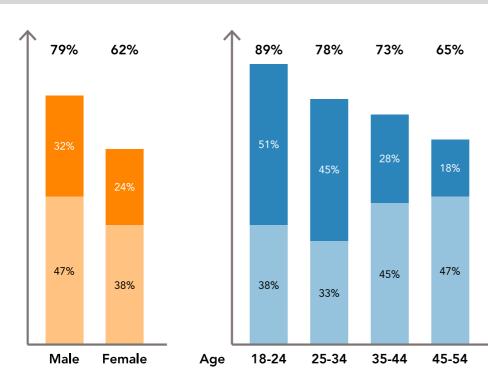
The government has helped by setting up the Korean eSports Association (KeSPA) which is the managing body for 25 eSports in the country, including Starcraft II: Legacy of the Void, League of Legends, Dota 2 and Counter-Strike: Global Offensive.

The exposure to eSports viewership is highest among the 18-34 year olds, with those in this age group being more likely to be regular viewers.

A significant number or 71% of survey respondents in South Korea have watched good variety of different eSports online, with the viewing of professional gamers gaming outside of competitions being less popular.

2018 South Korea penetration rate of eSports online viewership







55%

9%

46%

55-65

Viewing Preferences

Growing popularity of watching online games through streaming video

While video games have always been popular, it has been the streaming and televising of gaming that has vastly enlarged the fan base, allowing legions of fans to connect and build a more international and vibrant gaming community.

The streaming of online gaming is very popular, especially in China and Korea, with millions who have had some exposure to watching streamed live and recorded gaming tournaments and professional gamers.

Those who stream could be professional eSports players who stream themselves playing games outside of a tournament, or they could be "regular" gamers who stream in their free time.

Streaming online gaming is very popular, especially in China and South Korea

China

China has a relatively mature gaming audience with consistently high numbers watching gaming online. They watch both professional and regular gamers, who play live as well as recorded games in a competitive or non-competitive setting.

Some 78% of the respondents from China have watched a gaming tournament or competition that was streamed online live, and 78% have also watched regular gamers game online live. A similar figure of 77% having watched professional gamers game outside of competitions online live, and 77% have watched regular gamers in action on recorded games.

Japan

In Japan, a higher percentage watch regular gamers game online live according to 39% of respondents, and 33% have watched recorded gamers game online. In contrast, 28% have watched a gaming competition streamed live online.

The lower number of viewers tuning into eSports is likely to be because of laws that cap cash prizes for tournaments at 100,000 yen (\$895) for any competition that promotes or sells a specific product - originally aimed at discouraging gambling. This has in turn prevented professional tournaments from being organized, but that is slowly changing as the Japanese eSports Union (JeSU) is now working to circumvent those laws with gaming licenses.

South Korea

The viewing trends in South Korea mirror that of China, with 58% of the respondents having watched a gaming tournament or competition that was streamed online live. Some 54% having watched professional gamers game outside of competitions online live, and 57% have watched recorded gamers game online.

Viewing preferences in China, Japan and South Korea

	China	Japan	South Korea
Watch a gaming tournament / competition that was streamed live online	37% 41% 78%	21% 7% 28%	40% 18% 58%
Watch professional gamers game outside of competitions online live	38% 40% 78%	20% 8 28%	38% 16% 54%
Watch regular gamers game online live	38% 42% 80%	25% 14 % 39%	41% 18% 59%
Watch recorded gamers game online (professional or non-professional)	39% 38% 77%	21% 12 33%	40% 17% 57%
Watch a gaming tournament / competition live at venue of competition	41% 19% 60%	13 3 % % 16%	25% 4 29%
Watch a gaming tournament / competition live at internet / gaming cafes / other public venues	43% 32% 75%	13 4 % 17%	37% 12 % 49%
Take part in an international gaming tournament	29% 11 40%	8 2 % 10%	13 3 % % 16%
Take part in a domestic gaming tournament	34% 12 46%	10 2 % % 12%	16 4 20%

Legend:

Less Regular (<once a week) Regular (≥once a week)

Growing live spectatorship

The gaming industry used to be dominated by solitary gamers or small groups gaming together. With the proliferation of smart phones and digital screens, there is now a lifestyle shift to digital entertainment where entertainment is experienced from a digital display. Gaming fans now seek opportunities to either watch their favorite gamers compete or to pit their skills against other players.

With more eSports tournaments going live, there is the potential to bring eSports to a completely new level with unprecedented reach, as the streaming of a single event can reach a multitude of mobile devices, tablets, computers and televisions through a single broadcast - wherever the viewer is located.

China continues to stand out with the majority of the respondents having watched a gaming competition live at the competition venue or at other public places like internet and gaming cafes.

In contrast, both Japan and Korea have far lower numbers of people watching a gaming tournament live at the competition venue or at other public places like internet or gaming cafes.

China

The majority or 60% of respondents in China have watched a gaming competition live at the venue of competition and 75% have watched a gaming competition live at other public venues.

Respondents from China are also active participants in eSports, with 40% of respondents having taken part in an international gaming tournament and 47% have taken part in a domestic gaming tournament.

With a population of 959 million, China could have over 300 million viewers who regularly watch gaming tournaments live or streamed.

Japan

Some 15% of respondents have also watched a gaming competition live at the venue of competition and 17% have watched a gaming competition live at other public venues.

In terms of participation, some 10% of respondents have taken part in an international gaming tournament and 12% have taken part in a domestic gaming tournament.

South Korea

South Korean respondents have watched a gaming competition live at the venue of competition (29%) and 48% have watched a gaming competition live at other public venues.

Respondents are active participants in eSports, with 16% of respondents having taken part in an international gaming tournament and 20% have taken part in a domestic gaming tournament.

Regular viewers of eSports are likely to watch for at least 2 hours

The regular viewers of eSports are more likely to spend more than 2 hours at each session. This adds up to billions of hours of total viewing time in a week in North Asia.

China

In China, 41% of respondents spend 2 hours or more at a gaming competition that is streamed live online, and watch professional gamers game outside of the competitions online live.

Japan

In Japan, 36% of respondents spend 2 hours or more at a gaming competition that is streamed live online, and watch professional gamers game outside of the competitions online live.

South Korea

In South Korea, some 32% of respondents spend 2 hours or more at a gaming competition that is streamed live online, and watch professional gamers game outside of the competitions online live.

Total viewing time in a week

	A gaming tournament / competition that was streamed live online	Professional gamers game outside of competitions online live	Regular gamers game online live	
China	3 billion hours	1.8 billion hours	2.5 billion hours	
Japan	14.1 million hours	13.4 million hours	29.4 million hours	
South Korea	16.5 million hours	14.4 million hours	17.9 million hours	

Growing participation in eSports

Besides watching eSports alone at home or through a streaming service, fans in North Asia are seeking opportunities to game in person at live events. Almost half of China's respondents have taken part in gaming tournaments, in addition to watching eSports live or through video streaming. In contrast, both Japan and South Korea have lower percentages of respondents who participate in gaming tournaments.

China

Respondents from China are active participants in eSports, with 40% of respondents having taken part in an international gaming tournament and 47% in a domestic gaming tournament.

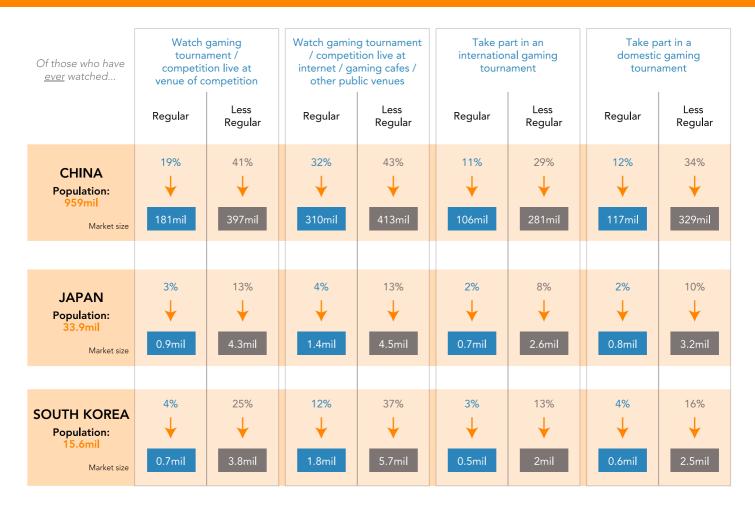
Japan

In terms of participation, some 10% of respondents from Japan have taken part in an international gaming tournament and 12% have taken part in a domestic gaming tournament.

South Korea

Respondents from South Korea are active participants in eSports, with 16% of respondents have taken part in an international gaming tournament and 20% have taken part in a domestic gaming tournament.

eSports participation and live spectatorship



Extremely high awareness of all streaming sites

Game streaming is how viewers of eSports can include in their pastime, allowing them access the action wherever they are - without having to travel to the tournament location or pay for a ticket.

Streaming eSports is very popular, especially in China and Korea, with millions who have had some exposure to watching live and recorded gaming tournaments and professional gamers streaming online.

With the rise in streaming eSports, there has been tremendous business opportunity in the streaming of video gameplay. Revenues from eSports and streaming game content is estimated to reach \$3.5 billion by the year 2021, according to a report by Juniper Research, a big increase from approximately \$1.8 billion in 2016.⁵

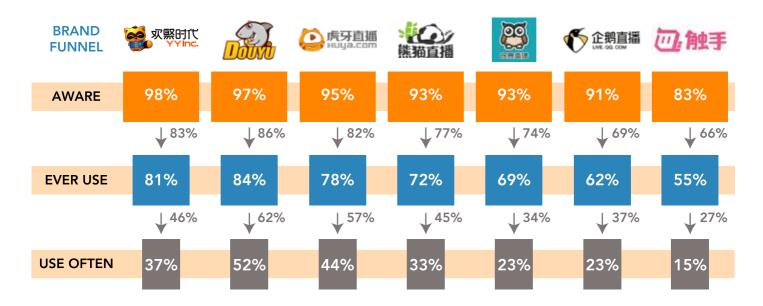
In North Asia, the awareness of streaming sites is extremely high. However, China is unique where the awareness and usage of game streaming sites are all local ones, compared to Japan and South Korea, where the respondents are more familiar with global names like YouTube, niconico, TwitCasting, Twitch and afreeca.

Popular game streaming platforms in China

The Chinese government's regulatory measures introduced on several western social media and portals, including livestreaming services, has led Chinese eSports fans to turn to local streaming platforms.

The respondents from China have an extremely high level of awareness of the various game streaming platforms, with over 90% of the respondents being aware of the more popular streaming services. The most used streaming gaming site is Douyu (52%), followed by Huya.com (44%) and YY.com (37%).

Amongst those who have ever streamed online games,

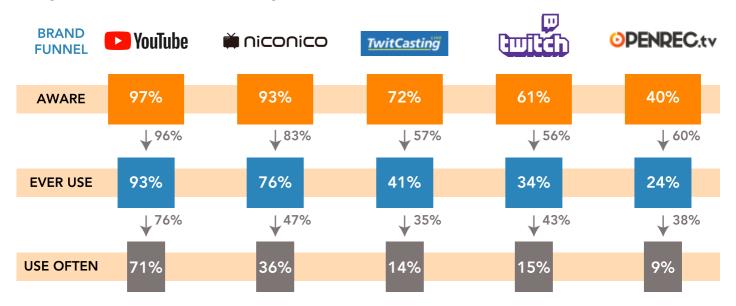


 $^{^{5}\,}https://www.juniperresearch.com/press/press-releases/esports-'let's-play'-revenues-to-reach-\%243-5-bill$

Popular game streaming platforms in Japan

In Japan, YouTube and niconico are the most well-known streaming sites, with the usage of YouTube being the highest, used by 71% of the respondents from Japan.

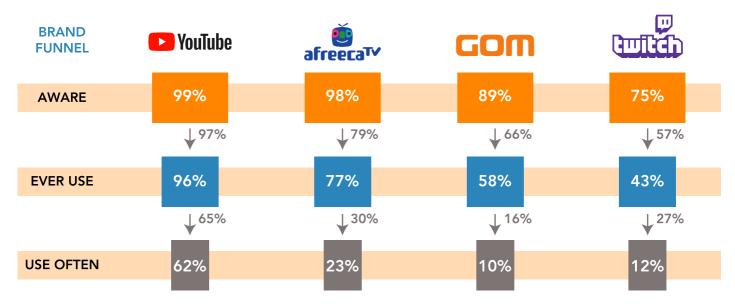
Amongst those who have ever streamed online games,



Popular game streaming platforms in South Korea

While awareness of all 4 streaming sites is high, YouTube is clearly the favorite streaming service for 62% of respondents from South Korea.

Amongst those who have ever streamed online games,



Device Choices

Mobile devices are the device of choice for watching and playing eSports

Asia's mobile first culture is causing an explosive growth in mobile eSports. The combination of increasingly sophisticated smartphones and attractive mobile games is helping to drive eSport on mobile devices.

Already, mobile eSports in Asia has a similar structure to PC-based eSports franchises, with its own leagues, horde of fans and competition tournaments.

For the survey respondents, mobile devices are the device of choice for viewing eSports across the North Asia markets, followed by laptops and desktops.

China

Some 52% of respondents from China prefer a mobile device to watch others play video games, and 65% will use mobile devices to play video games online.

Japan

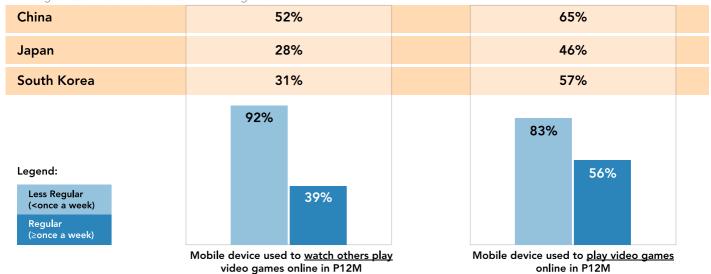
For Japan, 28% of respondents prefer a mobile device to watch others play video games, and 46% will use mobile devices to play video games online.

South Korea

Some 31% of respondents from South Korea prefer a mobile device to watch others play video games, and 57% will use mobile devices to play video games online.

Popular devices for watching others playing video games and playing video games online

Amongst those who have ever streamed online games



Video quality trumps sound quality

Even as internet connections get faster and more reliable than before, streaming video eats up a significant amount of bandwidth. For viewers in China and Japan, video quality is the most important factor affecting their viewing experience, followed by speed. South Korean respondents view speed, video quality and network latency as key factors.

China

In China, Video Quality is rated most important followed by Speed. In fact, 36% of the respondents ranked Video Quality first while 22% and 21% of them ranked Speed and Reliability respectively as their most important factor in their experience when watching video games online. Notably, Speed led with 31% as the second most important factor.

Japan

Video quality surpassed Speed and Reliability with a wide margin in Japan. 64% of the respondents either ranked Video Quality as their first or second important factor that matter to them when watching games online. This is followed by Speed with 49% and Reliability with 45% of respondents who ranked them as their top two important factors.

South Korea

South Korea respondents regarded placed more importance on Speed with 53% who ranked it as either their first or second important factors. This is closely followed by Video Quality with 50% and Network Latency with 49%.

Game Preferences

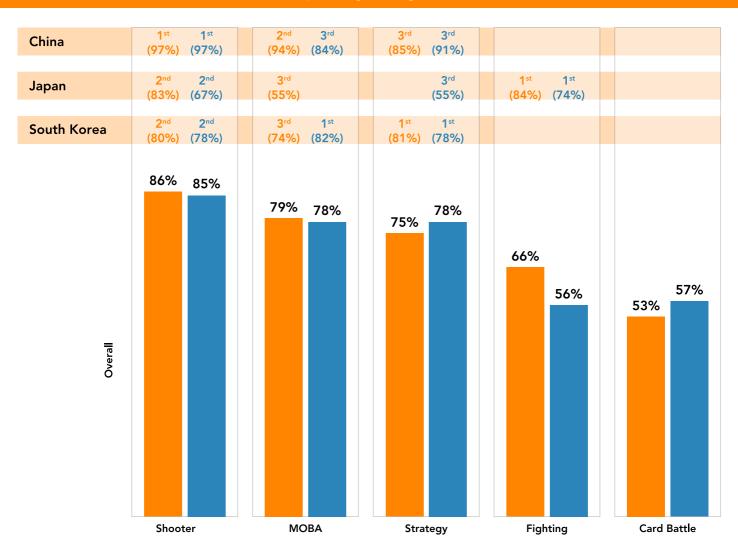
Shooter games gun down the competition

There are several game genres in competitive gaming, which include the following categories:

- First-person shooter games such as Halo, Counter Strike, Call of Duty
- Real-time strategy (RTS) games such as StarCraft, WarCraft, Command & Conquer
- Fighting games such as Street Fighter, Tekken, Super Smash Bros
- Multiplayer online battle arena (MOBA) games such as League of Legends, Dota, Smite
- Card battle games such as Hearthstone, Artifact, Gwent

In terms of the games streamed, shooter games are the most popular overall, with the highest appeal in all the three countries of China, Japan and South. On the other hand, fighting games are most popular in Japan and respondents in South Korea favour strategy games.

Popular game genre



Legend:

Categories of video games ever streamed games ever played

League of Legends is popular in China and South Korea, but Street Fighter is preferred in Japan

The preferred game genres hold true for those watching and playing the games, although slightly fewer are playing fighting games than watching.

Riot Games' League of Legends was the game of choice to watch and play for respondents from China and South Korea. However, in Japan fighting genre took the two top spots for games most commonly played.

Survey findings reveal that recreational gamers whose choice of games are popular eSports titles are more likely to eventually transition to professional gaming, especially for those who are regular gamers.

Future adoption of eSports by gamers who have never watched eSports

	Watch gaming competitio streamed	g tournament / on that was live online	Watch professional gamers game outside of competitions online live		Watch regular gamers game online live		Watch recorded gamers game online (professional or non-professional)	
Of those who have never watched	Regular	Less Regular	Regular	Less Regular	Regular	Less Regular	Regular	Less Regular
CHINA	5% 30%	6% 28%	13%	5% 26%	9% 37%	10% 15%	4%	7% 30%
							9%	
JAPAN	16%	36%	25%	3% 20%	23%	23%	33%	4% 11%
	9%							
SOUTH KOREA	39%	2% 18%	3% 27%	2% 19%	5% 30%	2% 9%	12% 25%	24%

China

Both League of Legends and PlayerUnknown's Battlegrounds (PUBG) are the clear front-runners as the most popular games being watched and most commonly played in China.

Some 38% of respondents in China picked League of Legends as their preferred game to watch, while 36% chose PUBG.

In terms of games most commonly played, 39% of respondents in China again chose League of Legends as their game of choice, followed by 37% choosing PUBG, and 29% choosing Crossfire.

Japan

Japan bucked the trend in terms of the preferred games to watch and play.

No specific games stood out for eSports viewership, with Street Fighter (11%), PUBG (10%) and Fortnite (8%) being the top three games watched.

South Korea

League of Legends, Overwatch and StarCraft are the most frequently watched games with 16%, 14% and 13% of the respondents choosing these games, respectively, in South Korea.

The same three games, League of Legends (16%), Overwatch (16%) and StarCraft (15%) are the top three games played in South Korea. Besides these games, fighting games like Street Fighter and Tekken as also popular in South Korea.

Methodology

The survey was conducted online in Japan, South Korea and China with 1,000 respondents each from these countries. All respondents were aged between 18 and 65 years old. In order to obtain an accurate representation in market proportions and size, results were weighted according to demographics breakdown (age and gender). Quotas were set for a representative mix of cities and household income levels.

Questions provided to the participants asked for the incidence of eSports spectatorship and participation, as well as, the device and Gaming genre participation rates. "Regular" and "Less Regular" were terms commonly used in the survey. Participants were informed that "Regular" refers to at least once a week while "Less Regular" refers to less often than once a week.

The survey was conducted and completed in the month of June 2018.

