

# Online Gaming in Asia: A Proving Ground for the Power of Networks

## Why seamless connectivity is key when milliseconds matter

Even before the pandemic, a reliable internet connection had become essential to the modern home, workplace, school and—thanks to smartphones—everywhere in between. Since then, uninterrupted connectivity has become ever more vital. We've relied on the internet to work, to communicate with colleagues, clients, and friends, and for entertainment during long stay-at-home periods.

Online gaming, for example, was already one of the world's largest and fastest-growing entertainment industries, but its popularity has exploded as people seek to find relief from isolation.

As a result, revenue from the global gaming market surged by 20% to US\$179.7 billion in 2020, and it is expected to reach US\$256.97 billion by 2025<sup>1</sup>.

## The world's largest gaming market

Once a basic arcade-style activity, gaming has become an immersive, social form of entertainment, featuring live video streaming and in-game communications, built on sophisticated network technology. It's a trend that's particularly pronounced in Asia, the world's largest gaming market<sup>2</sup>.

The gaming phenomenon is highlighted by eSports (short for *electronic sports*) through which online competition between gamers is broadcast to millions of people around the globe.

<sup>1</sup> Essence Global, 2021

<sup>2</sup> Statista, 2021

<sup>3</sup> Statista, 2021

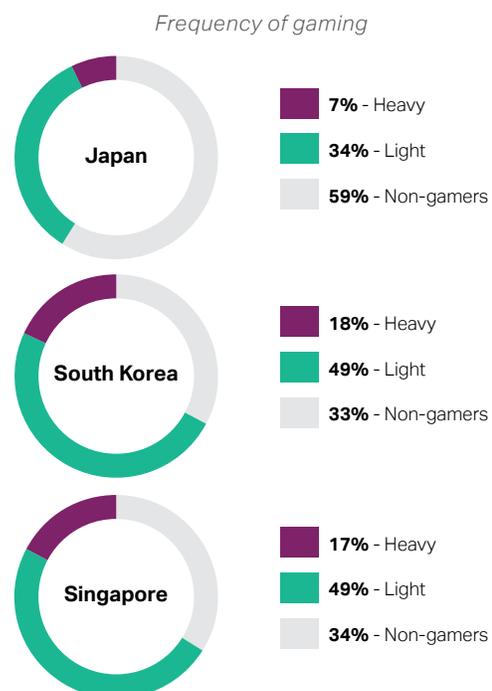
<sup>4</sup> Statista, 2021

The increasing use of smartphones is powering much of this growth—and it is predicted that smartphone adoption will continue to rise from 68% of the Asian market in 2020 to 83% by 2025<sup>3</sup>. Ubiquitous internet connectivity via smartphones means gamers are no longer tethered to any particular place—they can play anywhere, anytime.

These trends are producing big changes in the gaming landscape, which are expected to continue apace as more people gain access to broadband and network capability becomes ever more critical.

## How gamers differ in Singapore, Japan, and South Korea

Asia has close to 1.5 billion gamers<sup>4</sup>, and to learn more about them, Ciena commissioned research firm YouGov to survey consumers in Singapore, Japan, and South Korea.



The survey found some similarities between countries, with gamers mostly comprising unmarried Gen Z and Millennial men. But the survey uncovered significant differences, too. For example, gamers in Singapore are predominantly full-time workers, some with children under the age of 18. By contrast, Japanese gamers are most likely to be full-time students.

Furthermore, only 7% of respondents in Japan consider themselves “heavy gamers”—that is, spending 14 hours or more playing video games during a typical week. However, that figure was much higher in Singapore and South Korea, at 17% and 18%, respectively. In these two countries, heavy gamers are likely to be single men, full-time students, and from households with mid-to-high monthly income.

Meanwhile, 34% of Japanese survey respondents say they are “light gamers” (playing fewer than 14 hours a week). The percentage of light gamers increases sharply to nearly half (49%) among those in Singapore and South Korea.

Non-gamers comprise the balance of respondents for each country, with Japan having a significantly higher percentage of respondents who aren’t gamers.

## What makes a great gaming experience

Our survey found far fewer variations between countries when it comes to gamers’ preferences and the things that make gaming an enjoyable experience.

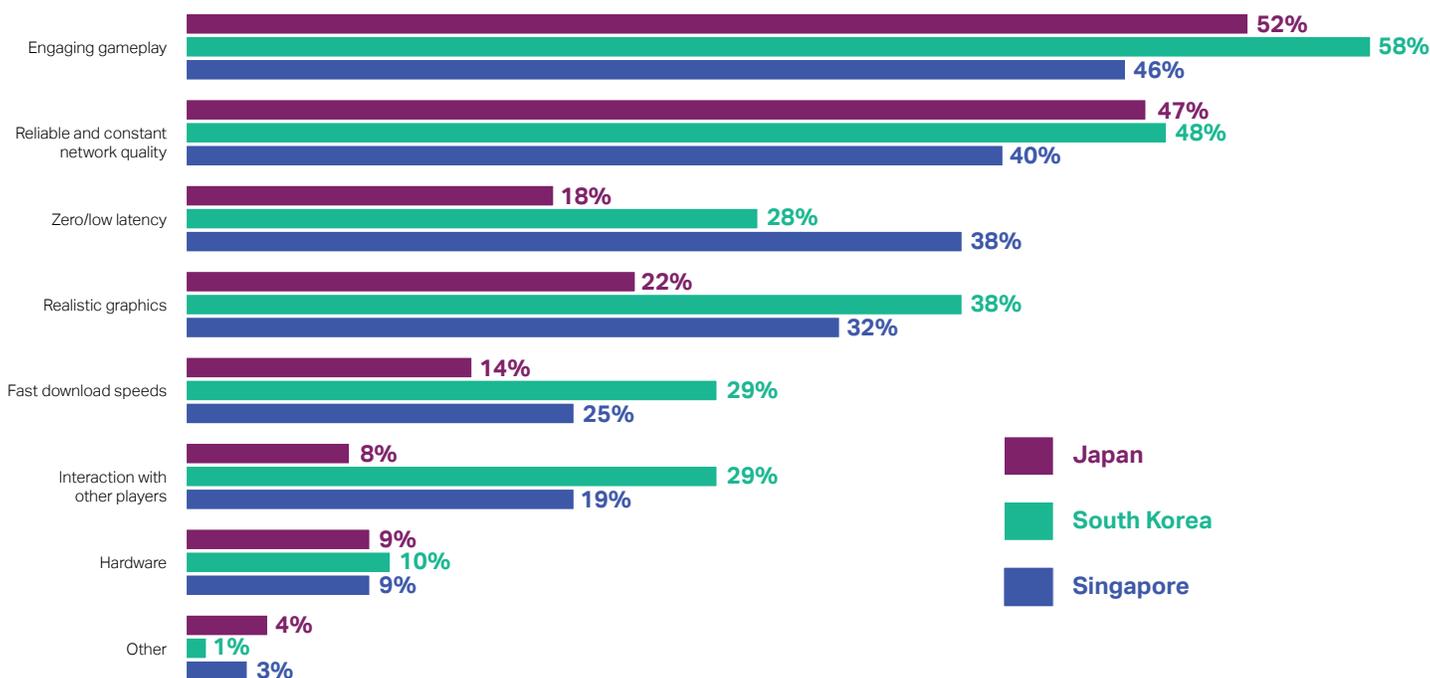
As you’d expect, the most important factor across all three countries is engaging ‘gameplay’—the features of a game such as its plot and the way it is played. More than half of the gamers in South Korea and Japan (58% and 52%, respectively) nominate gameplay as being important to them, followed by 46% in Singapore.

However, “reliability and consistency of network quality” is close behind as the next most important contributor to the gaming experience—as revealed by respondents in Singapore (40%), Japan (47%), and South Korea (48%).

The next most important factor to 38% of Singaporean gamers is “low latency”—the term used to describe delays, or lags, in network communications. Meanwhile, “realistic graphics” are highly valued by gamers in South Korea (38%) and Japan (22%).

Other important factors for a pleasing gaming experience include a comfortable gaming setting, such as a chair, couch, or table. This ranks particularly highly in Singapore (37%).

Factors to gaming enjoyment



In addition, a mobile phone optimized for gaming is important to 40% of South Koreans, 17% of Japanese, and one in 4 (25%) Singaporean gamers. Gamers in Singapore also rate a handheld gaming device and virtual reality (VR) headset as desirable, at 11% and 3%, respectively.

Other important factors across all three countries include room temperature, personal space, comfortable gaming attire and, not surprisingly, the ability to snack and munch while playing.

### The network’s importance in preventing churn

The survey confirmed the importance of the network in enabling an enjoyable gaming experience. Specifically, it needs to be a reliable network with low latency and capable of adapting to support a more immersive experience. In gaming lingo, “dc” (where players lose their connection with the game, usually because something happened with their internet connection) must be avoided at all costs.

What’s more, the survey found that gamers are willing to change service providers to get a more reliable and consistently uninterrupted connection. This willingness to change is particularly high in Singapore (63%) and South Korea (55%).

In fact, 42% of gamers in Singapore and 40% of gamers in South Korea say they are willing to pay more for faster internet speeds, although that figure drops to 18% in Japan.

### Building the network of the future now

Digital entertainment—including online gaming, streaming services, and social media—has evolved from activities once considered fringe or luxuries to become mainstream. It is now an important part of everyday life as people look for social interactions and enjoyable ways to spend their free time, particularly when their movement and ability to interact in person are limited.

Pandemic pressures notwithstanding, consumers expect a seamless connection when consuming digital content. And this demand can only be met by sophisticated network infrastructure.

Nowhere is the demand more apparent than in online gaming, where our survey insights reveal that high-level network reliability and availability, and low latency, are almost as important as engaging gameplay.

After all, when millions of eSport gamers and spectators simultaneously livestream, and *when milliseconds mean the difference between victory and defeat to billions of gamers*, it’s no longer just a battle for bandwidth—it’s a fight for the fittest network.

*I am willing to pay more for faster internet speeds*



*I will upgrade my router to have a better connection*



*I will consider switching service providers if I face connection issues/network during gameplay*



*I am willing to try a service provider that has a more reliable and consistently uninterrupted connection*



The rising popularity of virtual and augmented reality, mobile formats using smartphones and smartwatches, activity feeds (where users can follow the in-game progress of others), in-game chats, and other sophisticated features make it clear that interactive digital entertainment is very likely to continue to supersede other forms of entertainment such as films and television.

All this combines to place considerable, and increasing, pressure on our communication networks. In gaming speak, networks must “level up” (progress to the next level) to users’ demands—both expected and unexpected.

Specifically, networks should be able to adapt and dynamically scale, as the world of gaming leverages data and bandwidth-heavy technology such as artificial intelligence and automation. Networks need much more agility to instantaneously allocate capacity when and where it’s needed most. Service providers can meet this challenge with real-time network telemetry and intelligent software solutions.

These solutions can maximize connectivity by helping service providers understand where pressures are on the network. On top of this, with the [edge cloud](#), providers can locate servers as close to gamers as possible to provide an instantaneous gaming experience.

## About the survey

Ciena commissioned independent survey firm YouGov to conduct a survey of 3,080 adults in Singapore, Japan, and South Korea between 29 July - 6 August 2021. The figures have been weighted and are nationally representative of all Singaporean, Japanese, and South Korean adults (aged 18+).

## About Ciena

Ciena (NYSE: CIEN) is a networking systems, services and software company. We provide solutions that help our customers create the Adaptive Network™ in response to the constantly changing demands of their end-users. By delivering best-in-class networking technology through high-touch consultative relationships, we build the world’s most agile networks with automation, openness and scale. For updates on Ciena, follow us on Twitter [@Ciena](#), [LinkedIn](#), the [Ciena Insights blog](#), or visit [www.ciena.com](http://www.ciena.com).

For more information, please contact: [pr@Ciena.com](mailto:pr@Ciena.com)