



Insights into:

Asia's Top Mobile Markets

China, Korea, Japan



Mintegral

Contents

Foreword	3
1. Introduction to the key markets	5
2. Deep dive into the key markets	10
A. China	11
B. Japan	22
C. South Korea	32

FOREWORD

TAPPING INTO THE MOBILE-FIRST REGION

The past decade has seen the global app economy skyrocket since the first iPhone launched in 2007. Total app revenues reached \$87.1 billion in 2018 and will grow at a double-digit rate to reach \$129.2 billion by 2021, with games as the most lucrative category. APAC, which currently accounts for almost 60% of all app revenues worldwide, will lead this growth.

China, Japan, and South Korea are the three largest markets in the APAC region, each presenting unique opportunities for Western mobile developers, along with unique barriers to entry. These markets are mature and have long been dominated by local players: Tencent in China, Line in Japan, and Kakao in South Korea. Culturally, these markets are very different than the West, with Asian mobile gamers favoring local IPs, fantasy or anime-style graphic designs, different paying behavior, and more.

In this report created together with Mintegral, we take an in-depth look at Asia's top mobile markets, including their dynamics, consumer preferences, and growth potential.



\$75Bn

Total app revenues
in APAC in 2021



Jinjin Huang
China Market Analyst, Newzoo

KEY TAKEAWAYS

1 \$87.1BN IN GLOBAL APP REVENUES

Global consumer spending on apps reached \$87.1 billion in 2018 and will grow to \$129.2 billion by 2021. APAC'S share will decrease slightly from 58.2% in 2018 to 57.9% in 2021.

\$87.1Bn

global app revenues in 2018, **+14.0%** CAGR to 2021.

2 APAC SEES THE MOST SMARTPHONE USERS

In 2018, the number of smartphone users reached 3.0 billion globally, of which 53.4% were from the APAC region, or 1.6 billion. China accounted for half of APAC's total smartphone users in 2018.

1.6Bn

smartphone users in APAC in 2018, making up **53.4%** of the global market.

3 CHINA IS THE #1 APP MARKET

In 2018, consumer spending on apps in China reached \$26.4 billion, with 73.7% coming from mobile games. Driven by its mobile-first culture, China will remain the world's largest app market in 2021. In 2018, almost one third of global app revenues were from China.

\$26.4Bn

Chinese app revenues in 2018, of which **\$19.4Bn** came from mobile games.

4 JAPANESE MOBILE PAYERS ARE THE BIGGEST SPENDERS

Japanese mobile gamers are known for their purchasing power. In 2018, paying Japanese smartphone gamers spent \$371.0 per person on average, nearly 3.5 times more than American gamers. This makes Japan the #1 market by annual spend per smartphone game payer. Role playing is the #1 grossing mobile game genre in Japan.

\$371.0

annual spend per Japanese smartphone game payer in 2018 vs. **\$106.4** for Americans.

5 SOUTH KOREA HAS THE HIGHEST SMARTPHONE PENETRATION IN ASIA

The smartphone penetration in South Korea reached 67.6% in 2018, making it the #1 market by smartphone penetration in Asia. Samsung is by the largest mobile device brand in its home country, accounting for 65.5% market share in October 2018.

67.6%

smartphone penetration in South Korea in 2018, vs. **55.3%** in China and Japan.

The background consists of a large green shape on the left and a blue shape on the right, both with rounded corners and overlapping each other. The green shape is a large triangle pointing right, and the blue shape is a large triangle pointing left.

1.

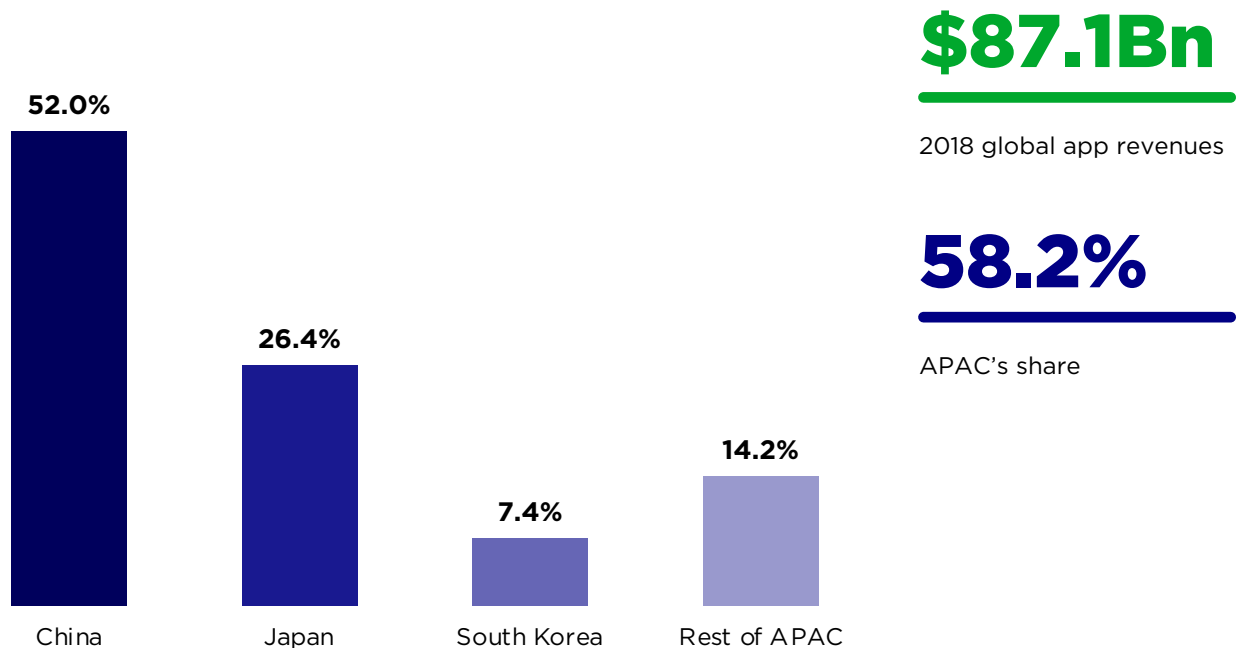
Introduction to the key markets

APAC IS THE WORLD'S #1 MOBILE MARKET

2018 MOBILE APP REVENUES | GLOBAL AND REGIONAL

SHARE OF APAC'S \$50.7 BILLION APP REVENUES

2018 | Per country



52%

of the total mobile app revenues in the APAC region in 2018 came from China.

Chinese consumer behavior has been continuously shifting from offline to online over recent years. With the widespread use of mobile phones, revenues generated from mobile apps have increased on a large scale. In 2018, China's total mobile app revenues accounted for more than half of the total in the APAC region, while Japan had a share of 26.4% and South Korea 7.4%.



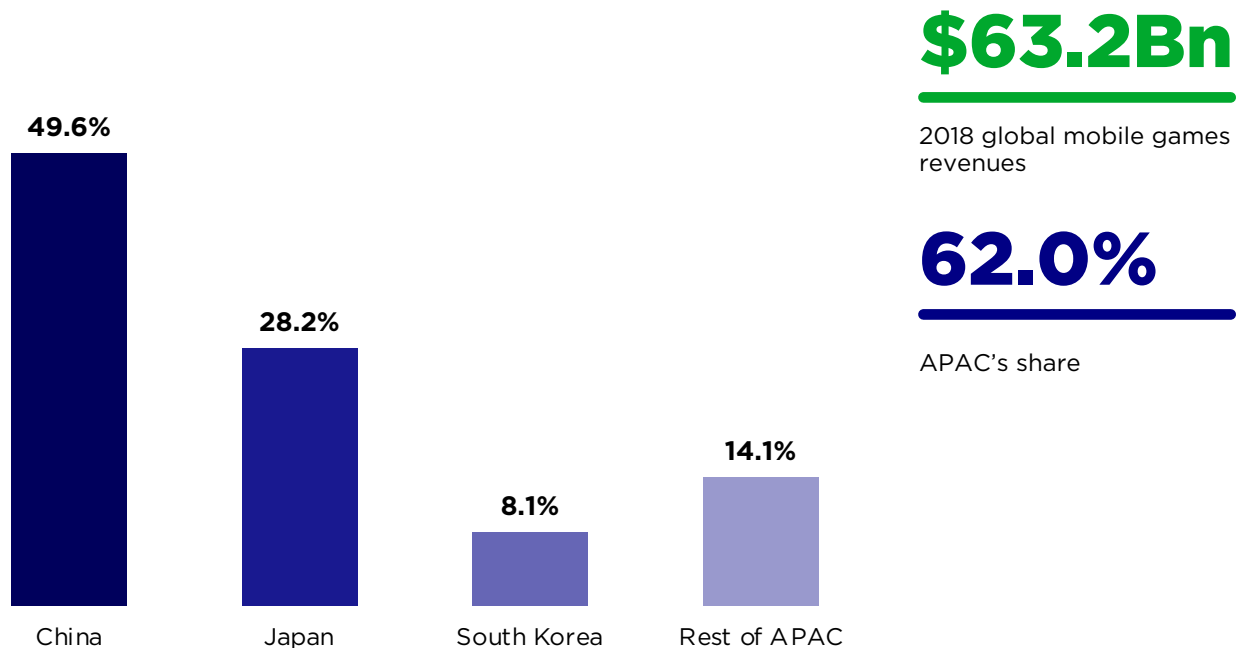
THE APAC REGION CONTRIBUTED MORE THAN HALF (58.2%) OF GLOBAL MOBILE APP REVENUES IN 2018.

MOBILE GAMES CONTRIBUTE NEARLY 80%

2018 MOBILE GAMES REVENUES | GLOBAL AND REGIONAL

SHARE OF APAC'S \$39.2 BILLION MOBILE GAME REVENUES

2018 | Per country



77%

of APAC's app revenues in 2018 were generated by mobile games.

Mobile games have been increasingly prevalent in Asia. This popularity has expanded from major players in the mobile games market, such as China, to emerging markets, like Southeast Asia, where there are professional esports events centered around mobile games.



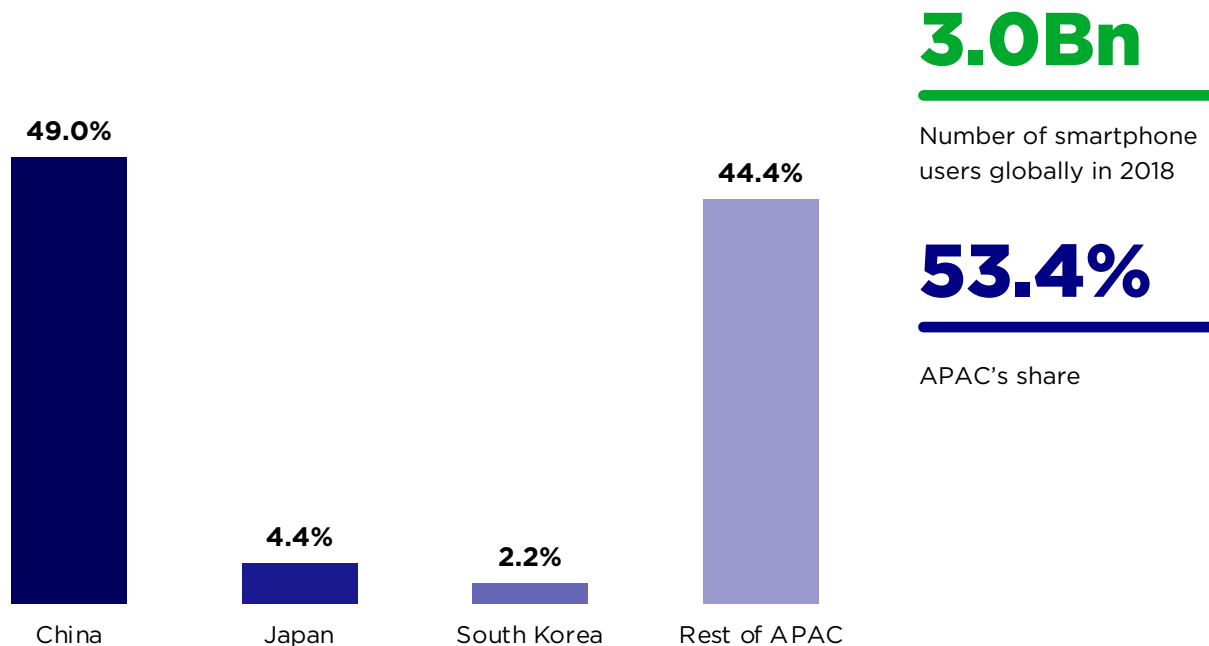
IN 2018, NEARLY THREE-QUARTERS OF GLOBAL MOBILE REVENUES WERE FROM GAMES.

APAC HAS THE MOST SMARTPHONE USERS

NUMBER OF SMARTPHONE USERS IN 2018 | GLOBAL AND REGIONAL

SHARE OF APAC'S 1.6 BILLION SMARTPHONE USERS

2018 | Per country



1.6Bn

Smartphone users in APAC in 2018.

Just under half of these were from China, with only 4.4% from Japan and 2.2% from South Korea.

Mobile devices have been increasingly common in people's daily life in recent years in Asia. In fact, 53.4% of the global smartphone users came from the APAC region in 2018.



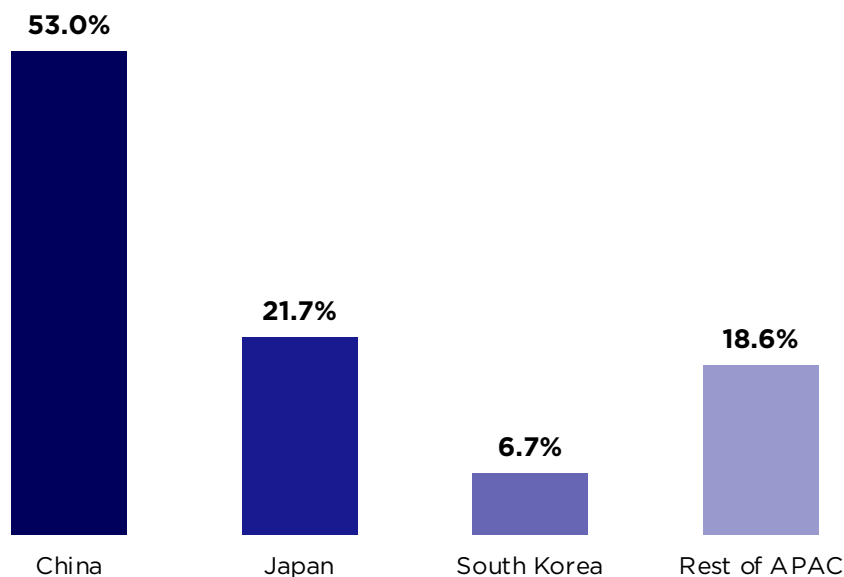
**OVER A QUARTER OF
GLOBAL SMARTPHONE
USERS IN 2018 CAME
FROM CHINA.**

THE APP MARKET WILL GROW STEADILY

2021 MOBILE APP REVENUES | GLOBAL AND REGIONAL

SHARE OF APAC'S \$74.7 BILLION APP REVENUES

2021 | Per country



\$129.2Bn

2021 global app revenues

57.9%

APAC's share

+14%

CAGR (2018-2021) of the global mobile app market.

In the next three years, the mobile app market will continue to grow at a healthy rate. However, APAC's revenue share will decrease slightly. Similarly, the revenue share that China, Japan, and South Korea take in the region will also decrease, leaving more room for emerging markets to grow. In 2021, the rest of APAC will take up 18.6% of total mobile app revenues, or \$13.9 billion.



GLOBALLY, NON-GAME APP REVENUES (+16.7% CAGR 2018-2021) WILL GROW SLIGHTLY FASTER THAN MOBILE GAMES REVENUES (+13.0% CAGR 2018-2021) TOWARD 2021.

2.

Deep dive into the key markets





China is the world's largest mobile app market, accounting for

30.8%

of global app revenues in 2018.

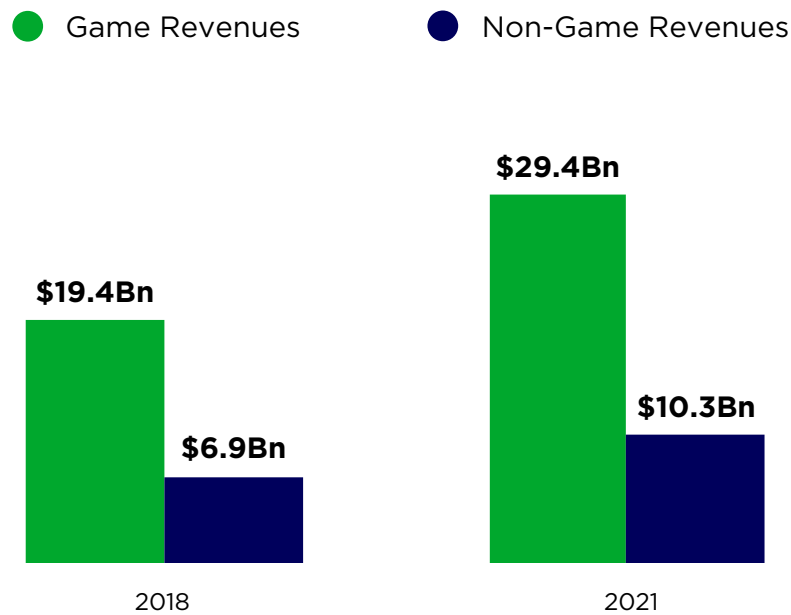


CHINA IS THE WORLD'S #1 APP ECONOMY

MOBILE GAMES ACCOUNT FOR NEARLY 75% OF TOTAL APP REVENUES

TOTAL CHINESE MOBILE APP REVENUES

2018 & 2021



+15%

CAGR 2018-2021 of the Chinese mobile app market.

Game revenues are still the biggest revenue stream in China's mobile market. In 2018, revenues generated from mobile games were nearly three times that of non-game apps. This will remain the case in 2021.



NEARLY ONE-THIRD (30.8%) OF THE WORLD'S APP REVENUES CAME FROM CHINA IN 2018.

MOBILE GAMERS FAVOR IMMERSIVE TITLES

THE TOP GAME GENRES IN CHINA ARE VERY DIFFERENT THAN IN THE WEST

TOP 10 iOS GENRES IN 2018

By revenues and by number of downloads

#	BY REVENUES	BY DOWNLOADS
1	Role Playing	Action
2	Action	Role Playing
3	Strategy	Strategy
4	Adventure	Arcade
5	Simulation	Puzzle
6	Card	Family
7	Puzzle	Adventure
8	Racing	Simulation
9	Family	Card
10	Casino	Board

IMMERSIVE

gaming experiences are key for monetizing Chinese mobile gamers.

Chinese mobile gamers are likely to spend money on role-playing games (RPG) because of their immersive gaming environment. Among all game genres, RPG usually has the greatest average revenue per user, but such heavy monetization is also occasionally criticized by gamers.













ROLE-PLAYING GAMES ARE WELL-KNOWN FOR THEIR ABILITIES TO GENERATE REVENUES NOT ONLY IN CHINA, BUT IN ASIA GENERALLY.

THE MOBILE GAMES MARKET IS VERY TOP-HEAVY

THE TWO LARGEST PUBLISHERS TAKE MORE THAN 60% OF THE MARKET

TOP 10 GROSSING iOS GAMES IN 2018

#	GAME	GENRE	PUBLISHER
1	 Honor of Kings	Action	Tencent
2	 Fantasy Westward Journey	Role Playing	NetEase
3	 QQ Speed Mobile	Racing	Tencent
4	 Chu Liu Xiang	Role Playing	NetEase
5	 Fantasy Westward Journey 2	Role Playing	NetEase
6	 King of Chaos	Strategy	Tencent
7	 New Ghost	Role Playing	NetEase
8	 Onmyoji	Role Playing	NetEase
9	 Legacy TLBB Mobile	Role Playing	Tencent
10	 MU Awakening	Role Playing	Tencent

7/10

of the top-grossing iOS games in China were RPGs in 2018.

Looking at publishers, Tencent and NetEase were the only players in the top 10 mobile games in 2018, indicating that the Chinese mobile games market is very top-heavy. In fact, the two publishers combined accounted for more than 60% of the total Chinese mobile games market in 2018.













INTERESTINGLY, FOREIGN COMPANIES ARE REQUIRED TO PARTNER WITH LOCAL PUBLISHERS TO PUBLISH GAMES IN CHINA.

STREAMING APPS ARE POPULAR IN CHINA

LOCAL PLAYERS DOMINATE THE MARKET

TOP 10 GROSSING iOS NON-GAME APPS IN 2018

#	APP	GENRE	PUBLISHER
1	 QQTV	Video	Tencent
2	 iQiyi	Video	iQiyi
3	 Kuaishou/Kwai	Video	Kwai
4	 Youku	Video	Youku
5	 QQ	Social Networking	Tencent
6	 Momo	Social Networking	Momo
7	 QQ Music	Music	Tencent
8	 WeSing	Music	Tencent
9	 Ximalaya FM	Books	Xi Da
10	 QQ Reading	Books	Tencent

4/5

of the top-grossing non-game apps were streaming apps.

The streaming market in China is dominated by Baidu, Alibaba, Tencent (BAT) namely Baidu's iQiyi, Alibaba's Youku, and Tencent's QQTV. Revenues from streaming apps rely heavily on advertising, as streaming platforms are excellent places for brands to gain exposure through different forms of promotion.



THE CHINESE GOVERNMENT'S CONTROL OVER STREAMING PLATFORMS HAS BECOME INCREASINGLY STRICT BECAUSE OF THE INCREDIBLE GROWTH IN THIS MARKET.

CHINA HAS A UNIQUE APP STORE ECOSYSTEM

WITH THE ABSENCE OF GOOGLE PLAY IN THE MARKET

TOP 10 ANDROID APP STORES BY INSTALL

January 2019

#		APP STORE	APP STORE (CHINESE)	COVERAGE
1		MyApp (Tencent)	应用宝	21.6%
2		360 Mobile Assistant	360手机助手	12.3%
3		OPPO App Store	OPPO软件商店	12.3%
4		Huawei App Market	华为应用市场	11.4%
5		Xiaomi App Store	小米应用商店	10.2%
6		Xiaomi Game Center	小米游戏中心	9.0%
7		Baidu Mobile Assistant	百度手机助手	6.0%
8		Vivo App Store	Vivo应用商店	5.2%
9		Vivo Game Center	Vivo游戏中心	5.0%
10		Huawei Game Center	华为游戏中心	4.5%

3/10

of the top Android app stores by install in January 2019 were game centers.

Tencent's MyApp dominates the third-party Android app store market, with a coverage of 21.6%. This is significantly higher than other third-party app stores and almost two times higher than the #2 app store: 360 Mobile Assistant. Notably, Huawei has been making bold moves by entering the gaming phone market; its game center was #10 in January 2019 in terms of coverage.



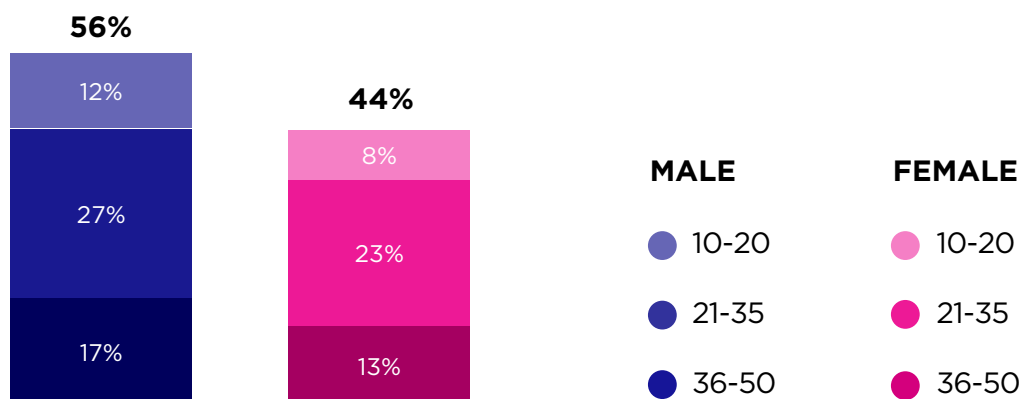
XIAOMI GAME CENTER IS BY FAR THE MOST POPULAR THIRD-PARTY APP STORE SPECIFICALLY FOR MOBILE GAMES, WITH A COVERAGE OF 9.0% IN JANUARY.



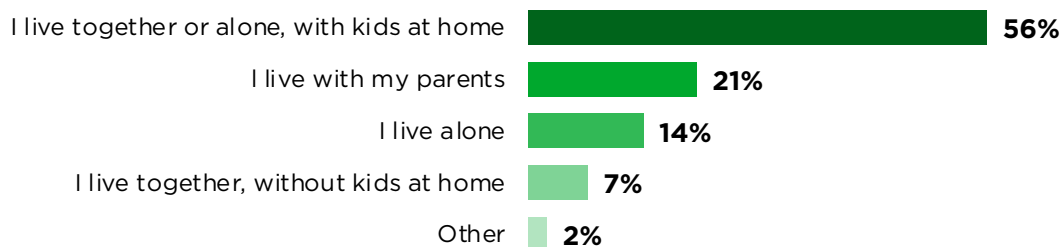
MOST CHINESE MOBILE GAMERS HAVE CHILDREN

DEMOGRAPHICS OF CHINESE MOBILE GAMERS

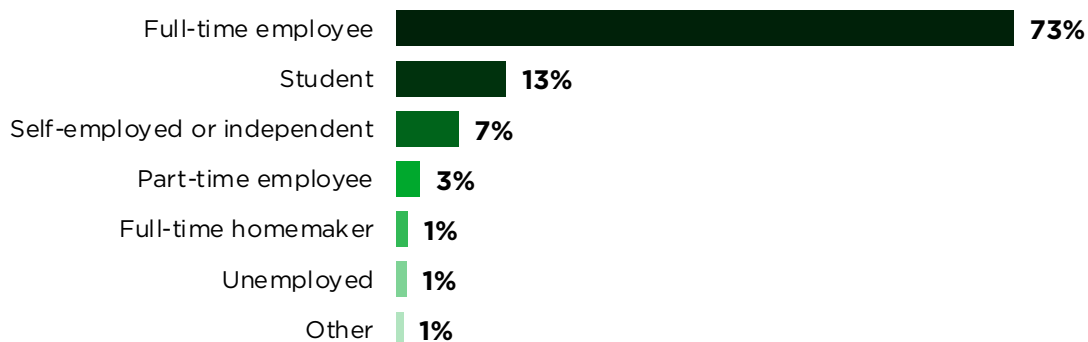
AGE-GENDER SPLIT



HOME SITUATION*



WORK SITUATION*



Base: mobile players in Tier 1 & Tier 2 cities, aged 10-50.

* Respondents aged 10-15 do not get questions about their home and work situations.



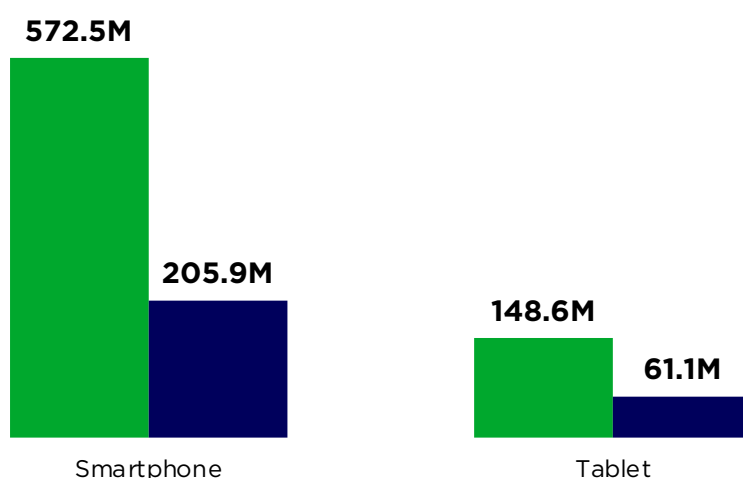
TABLET GAMERS ARE MORE LIKELY TO PAY

IN COMPARISON TO SMARTPHONE GAMERS

NUMBER OF MOBILE PLAYERS AND PAYERS | 2018

Smartphone & Tablet

● Players ● Payers





206M

Chinese smartphone gamers spent money in 2018.

Although the number of tablet players was only a quarter of smartphone players, the percentage of payers was higher – 41.2% vs. 36.0%.

Unsurprisingly, given screen size, revenues generated by tablets mainly came from highly visualized content, such as digital books, e-magazines, and movies.

ARPPU & CONVERSION RATE* iOS and Android | October 2018

		
ARPPU	\$25.0	\$45.6
Conversion Rate	3.1%	4.0%

 deltaDNA

*The metrics are calculated for individual games separately in each market. Across these games, the 75th percentile score is calculated.

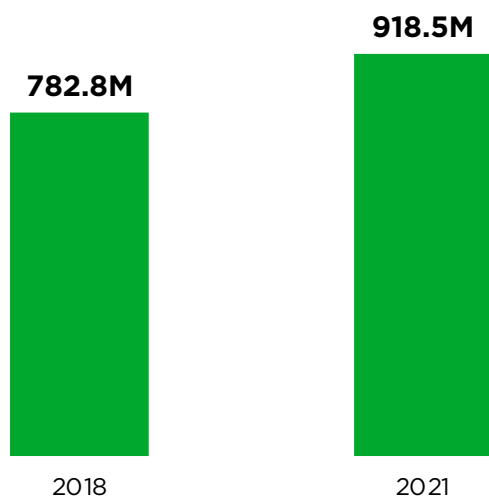


A HEALTHY GROWTH IN THE DEVICE MARKET

NUMBER OF SMARTPHONE USERS IN 2018 AND FORECAST TOWARD 2021

NUMBER OF SMARTPHONE USERS

2018 & 2021



+5.5%

CAGR 2018-2021 of the number of smartphone users

55%

Smartphone penetration in China in 2018.

In 2018, China was the country with the largest number of smartphone users in the world, followed by India (374.9 million) and United States (251.7 million). In 2021, this will remain the same, with India seeing the highest growth (CAGR +17.0%) to 601.0 million in 2021.



**IN 2021, THERE WILL BE
918.5 MILLION SMARTPHONE
USERS IN CHINA.**

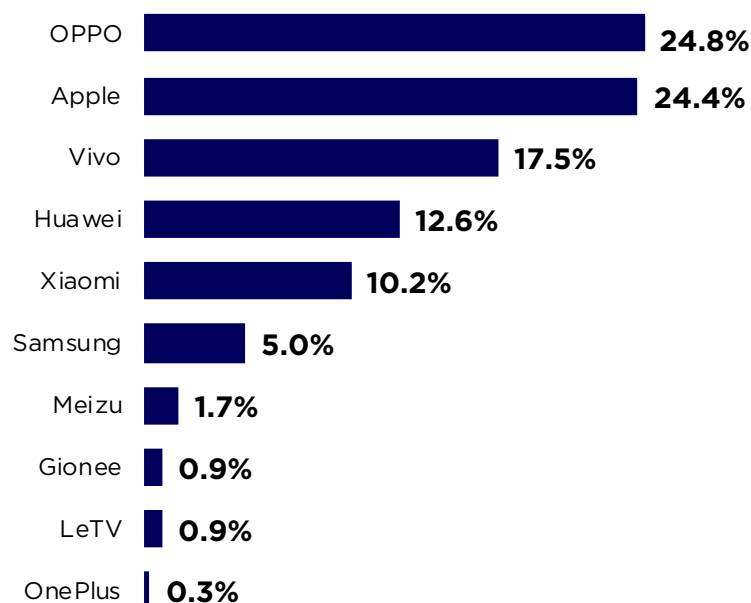


LOCAL BRANDS LEAD THE DEVICE MARKET

TOGETHER, THEY ARE EATING APPLE'S SHARE IN THE MARKET

TOP MOBILE BRANDS & MODELS

By monthly active users | October 2018



1. iPhone 6
2. iPhone 7 Plus
3. OPPO R9
4. iPhone 6s
5. iPhone 6s Plus

25%

of all active devices in October 2018 were OPPO.

October was the first time OPPO overtook Apple as the largest mobile device brand in China. OPPO is by far the fastest-growing mobile brand in the country; the number of active OPPO devices grew from 96.3 million in May 2016 to 261.7 million in October. Other Chinese Android manufacturers such as Vivo, Huawei, and Xiaomi are also gradually taking market share from Apple in China.



**ONE-THIRD OF ACTIVE
SMARTPHONES IN CHINA WERE
HIGH-END* AS OF OCTOBER 2018.**

*High-end device split is based on CPU performance according to widely used (geekbench multicore) benchmark tests. High-end devices perform at least two standard deviations better than the median benchmark score.

SUMMARY AND KEY TIPS

MINI PROGRAMS: WHEN ONLINE AND OFFLINE OCCASIONS ARE COMBINED

With 782.8 million smartphone users and total mobile revenues of \$26.3 billion, China has surpassed the United States as the biggest mobile market in the world. Indeed, it seems that Chinese consumers cannot live without smartphones now, as their lifestyle, behavior, and consumption decisions have moved online. In particular, Chinese mobile users like to consume video content on their smartphones; four of the top five grossing iOS non-game apps in China in 2018 were video apps.

China is also the biggest player in the mobile games market. In 2018, 30.8% of global app revenues came from China, of which nearly three-quarters were from mobile games. Among all genres, RPG contributed the most to Chinese mobile game revenues due to RPG's heavy monetization systems. However, the #1 grossing iOS game in 2018 in China was MOBA title Honor of Kings, thanks to Tencent's social media network bringing the game a huge user base.

When looking at the overall mobile market in China, harsh government regulations on both mobile games and non-game apps still need to be considered. In March 2018, the Chinese government stopped issuing licenses to new games, causing a sharp decrease in the growth rate of the gaming market. This led to multiple small studios breaking up and layoffs in big companies. The restrictions on short-form videos became stricter as well, limiting the growth of streaming platforms. Although the game approval process began again in January 2019 and the streaming industry has become more regulated, government regulation is the major reason for the Chinese mobile market's high entry barrier.

WECHAT MINI PROGRAMS

Mini programs were first introduced to Chinese smartphone users at the end of 2017. Since then, they have been changing consumers' lifestyles in every way. Suitable for apps with low-frequency usage, mini programs are less work to design and develop compared to traditional mobile applications. Mini programs also differ from apps in how they are distributed. Unlike app stores, where most revenues are generated by extremely popular apps, the more widespread distribution of mini programs allows for each mini program to enjoy an equal chance of reaching new users. Notably, the most efficient way to acquire users is through group chat, where people share and recommend mini programs to friends. This shows mini programs' heavy dependence on social networks. Game developers have already seen huge potential in this market, with WeChat starting to monetize mini games on Android through rewarded video ads in April 2018. There are now 10 mini games with more than \$1.48 million in monthly in-game revenues.

RECOMMENDATIONS AND IMPLEMENTATIONS

As light versions of traditional mobile apps, mini programs are excellent tools for directing traffic from offline to online. In specific occasions where people find it too much trouble to download an app they may not use again in the future, developers might want to consider mini programs first, whether in the form of games, video, or music, leveraging WeChat's large user base.



The annual spend per
Japanese smartphone
game payer was nearly

3.5X

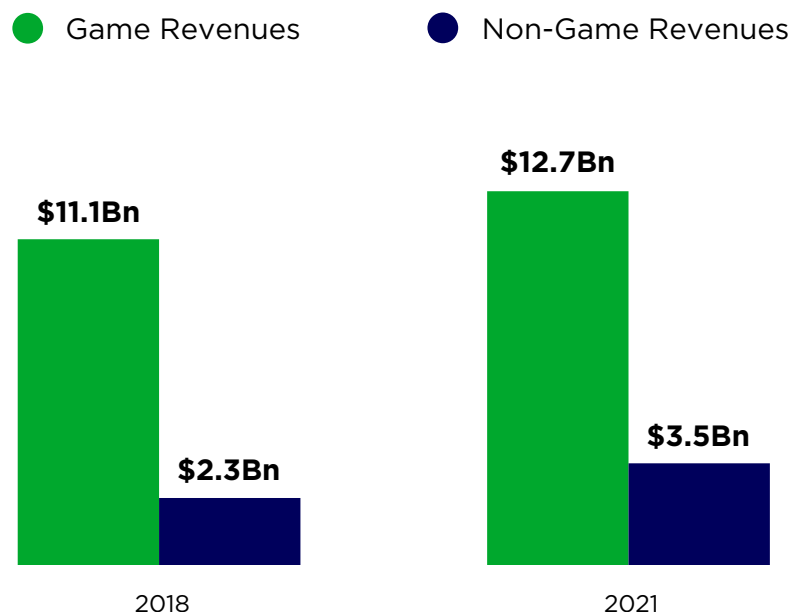
more than that of
Americans in 2018.

THE SLOWEST GROWTH OF THE THREE MARKETS

OVERVIEW OF THE JAPANESE MOBILE MARKET

TOTAL JAPANESE MOBILE APP REVENUES

2018 & 2021



+7%

CAGR 2018-2021 of the Japanese mobile market.

In 2018, revenues generated from mobile games in Japan were almost five times more than those from non-game apps. However, the non-game app market in Japan has much higher growth potential, with a CAGR of +14.3% compared to +4.8% for the mobile games market.



**15.4% OF THE
WORLD'S APP REVENUES
CAME FROM JAPAN IN 2018.**

PUZZLE GAMES ARE MORE POPULAR IN JAPAN

THAN IN THE OTHER TWO MARKETS

TOP 10 iOS GENRES IN 2018

By revenues and by number of downloads

#	BY REVENUES	BY DOWNLOADS
1	Role Playing	Action
2	Action	Puzzle
3	Adventure	Adventure
4	Card	Role Playing
5	Puzzle	Simulation
6	Strategy	Arcade
7	Simulation	Family
8	Sports	Strategy
9	Music	Board
10	Arcade	Sports

COMBINATIONS

of different gameplay tactics appeal to Japanese mobile gamers.

It has become increasingly popular for Japanese game developers to combine several game genre elements in one game. The #3 grossing iOS game is an example of this; Puzzle & Dragons is a card game in essence but with RPG design. This type of game has a high retention rate among Japanese gamers, who seek continuous development in games.






**THE TOP MOBILE GAMES IN JAPAN
TEND TO INCLUDE ROLE-PLAYING
ELEMENTS.**

JAPANESE GAMERS ARE LESS COMPETITIVE

COMPARED TO CHINESE AND KOREAN GAMERS

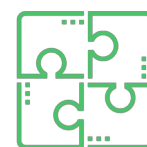
TOP 10 GROSSING iOS GAMES IN 2018

#		GAME	GENRE	PUBLISHER
1		Monster Strike	Puzzle	XFLAG
2		Fate/Grand Order	Role Playing	Aniplex
3		Puzzle & Dragons	Puzzle	GungHo
4		Knives Out	Battle Royale	NetEase
5		Dokkan Battle	Puzzle	BANDAI NAMCO
6		Granblue Fantasy	Role Playing	Cygames.
7		Pokémon GO	Casual	Niantic
8		Power Pros	Sports	KONAMI
9		LINE: Disney Tsum Tsum	Casual	LINE
10		KIZNA	Strategy	Sumzap

3/5

of the top-grossing iOS games in Japan in 2018 were match-3 games.

Match-3 games appeal to Japanese mobile gamers due to their simple game design and they have huge potential for generating revenues. When combined with classic IPs, these match-3 titles become even bigger hits and players are more likely to spend money.












**JAPANESE MOBILE GAMERS
LIKE TO PLAY CASUAL GAMES
IN BETWEEN ACTIVITIES.**

DATING APPS AND COMICS ARE BIG

JAPAN HAS A VERY STRONG AND UNIQUE LOCAL CULTURE

TOP 10 GROSSING iOS NON-GAME APPS IN 2018

#	APP	GENRE	PUBLISHER
1	 LINE Manga	Books	LINE Corporation
2	 LINE	Social Networking	LINE Corporation
3	 LINE MUSIC	Music	LINE MUSIC
4	 Pairs	Social Networking	eureka
5	 Piccoma	Books	Kakao
6	 Tapple	Social Networking	MatchingAgent
7	 Netflix	Video	Netflix
8	 SHOWROOM	Entertainment	SHOWROOM
9	 Omiai	Social Networking	Net Marketing
10	 Shonen Jump	Books	SHUEISHA

4/10

of the top-grossing apps are social networks, of which three are dating apps.

Comic and manga apps are also popular, as comics and manga are rooted in Japanese culture. As smartphone penetration in Japan grows, traditional comic books are constantly being made into apps. Japanese gamers like to use these apps in between activities, like when they are commuting.

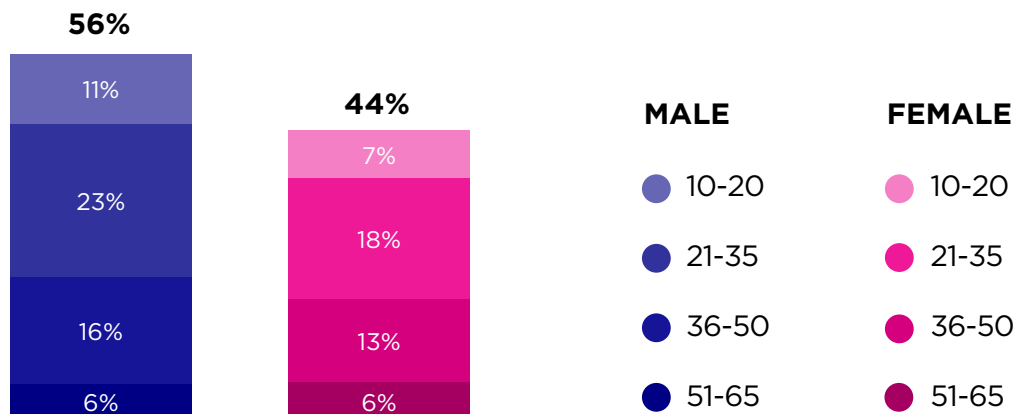


LINE IS BY FAR THE MOST POPULAR CHAT APP IN JAPAN; 75% OF THE JAPANESE ONLINE POPULATION INDICATE THAT THEY ACTIVELY USE IT.

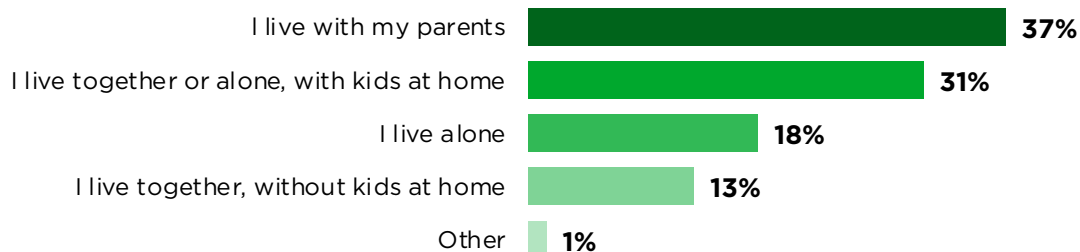
THE GAMING AUDIENCE IS RELATIVELY YOUNG

DEMOGRAPHICS OF JAPANESE MOBILE GAMERS

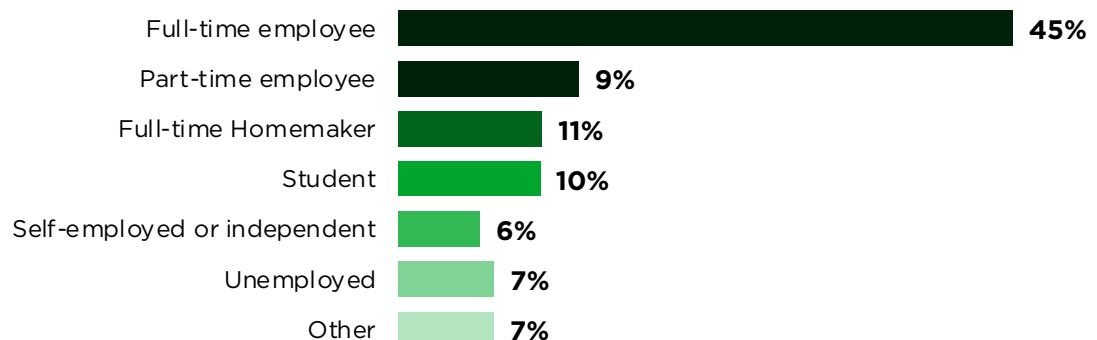
AGE-GENDER SPLIT



HOME SITUATION*



WORK SITUATION*



Base: mobile players aged 10-65.
 * Respondents aged 10-15 do not get questions about their home and work situations.

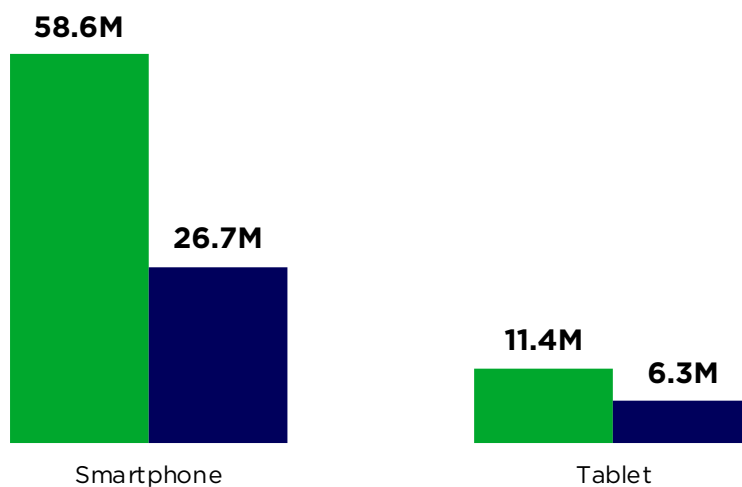
ALMOST HALF OF GAMERS WILLING TO SPEND

ON AVERAGE, JAPANESE MOBILE GAMERS PAY THE MOST IN THE WORLD

NUMBER OF MOBILE PLAYERS AND PAYERS | 2018

Smartphone & Tablet

● Players ● Payers





46%

of Japanese smartphone players paid for games in 2018.

Japan has the highest payment ratio among smartphone gamers compared to China or South Korea. In general, Japanese gamers tend to be loyal players with longer lifetime value. In other words, they are more willing to pay for the games they like.

ARPPU & CONVERSION RATE* iOS and Android | October 2018

		
ARPPU	\$24.2	\$26.2
Conversion Rate	3.7%	3.7%

 deltaDNA

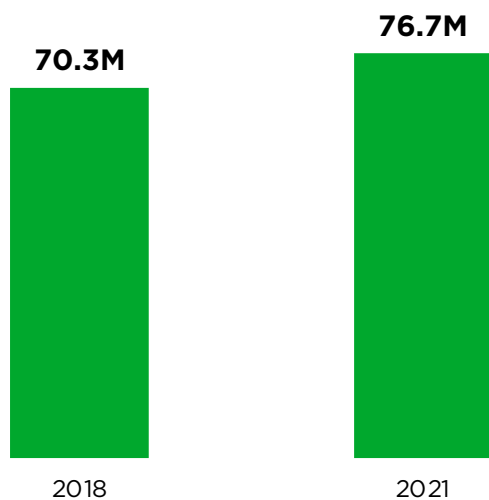
*The metrics are calculated for individual games separately in each market. Across these games, the 75th percentile score is calculated.

SMARTPHONE USERS ARE GROWING SLOWLY

NUMBER OF SMARTPHONE USERS IN 2018 AND FORECAST TOWARD 2021

NUMBER OF SMARTPHONE USERS

2018 & 2021



+2.9%

CAGR 2018-2021 of the number smartphone users

55%

Smartphone penetration in Japan in 2018.

Japan has the lowest CAGR 2018-2021 for smartphone users among the three countries, as its market is more saturated than that of China or South Korea. Additionally, because the population is aging and feature phones remain popular, the number of smartphone users is not likely to increase as much as the other two markets.



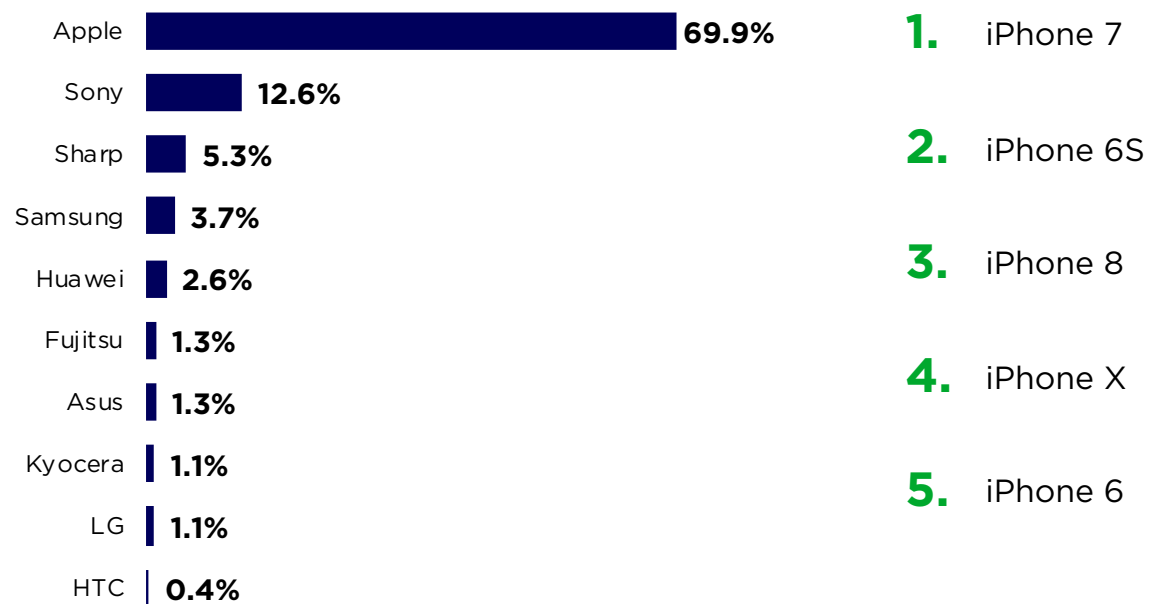
AS A HIGHLY DEVELOPED COUNTRY, JAPAN HAS THE SEVENTH-HIGHEST NUMBER OF SMARTPHONE USERS IN THE WORLD.

APPLE IS BY FAR THE LEADING BRAND

TOP DEVICES | SMARTPHONE AND TABLETS COMBINED

TOP MOBILE BRANDS & MODELS

By monthly active users | October 2018



70%

of all active devices in October 2018 were Apple.

Apple dominates the Japanese mobile market; the top five mobile device models in 2018 were all Apple. In fact, ever since Apple introduced Japan to the 3G in 2008, the iPhone has been the #1 choice for the majority of Japanese consumers, especially young women. This group is attracted to the iPhone's seemingly trendy design and also fears being left out.



MORE THAN HALF (51.6%) OF THE ACTIVE SMARTPHONES IN JAPAN WERE HIGH-END* AS OF OCTOBER 2018.

High-end device split is based on CPU performance according to widely used (geekbench multicore) benchmark tests. High-end devices perform at least two standard deviations better than the median benchmark score.



SUMMARY AND KEY TIPS

JAPAN'S BARRIER TO ENTRY IS LOWER THAN CHINA'S

Japan is the second-largest mobile market in APAC. In 2018, 26.4% of the region's app revenues came from Japan. This share will drop to 21.7% in 2021 largely due to the fast growth of emerging markets such as India and Southeast Asia. Of total app revenues in 2018, 82.7% came from games, or \$11.1 billion, making Japan the world's third-largest mobile games market. Notably, Japanese mobile gamers are the most willing to pay among the three markets and they also tend to spend the most. In fact, the Japanese mobile gamers are the biggest spenders in the world; in 2018, the annual spend per Japanese smartphone game payer reached \$371.0, nearly 3.5 times more than what Americans spend.

Like in most Asian markets, mobile RPGs generate the most revenues in Japan. However, in comparison to Chinese and Korean mobile gamers, Japanese mobile gamers are more likely to spend on less competitive genres such as card and puzzle games. Because competitive gaming is less popular in Japan and the government has limited esports prize pools, mobile esports popularity is quite low.

The Japanese app market is still largely dominated by local companies, but because it is less regulated than the Chinese market, the barrier to entry for foreign publishers is lower.

LOCALIZATION IS THE KEY

Japan is a market with a very strong and unique local culture that is quite different from the West. Localizing the language, design, and content is crucial. NetEase's mobile battle royale title *Knives Out* is a good example of successful localization in Japan. In addition to launching two battle royale games targeting the Western and Eastern markets separately, NetEase appealed to Japanese gamers by consulting the writer of the original Japanese film *Battle Royal* for *Knives Out*'s content update and storyline. Japan contributed more than 90% of the title's total overseas revenues in 2018.

MAKE GOOD USE OF SOCIAL MEDIA PLATFORMS

Social networks play an important role in how people discover new apps and games. Among the three key markets, Japanese mobile gamers are the most likely to discover new games from social network updates and news (24%). LINE Messenger is by far the largest social network platform in Japan. LINE Corporation also owns LINE News and LINE Manga, which cater specifically to the Japanese market.

PROMOTE YOUR APPS USING CELEBRITIES

Similar to China and South Korea, it is very common in Japan to promote an app with a celebrity spokesperson involved in the advertising. This is less common in the West. Spotify hopped on the trend at the end of 2017 by featuring Nijirô Murakami, a famous male actor in Japan, in its advertising campaign.



Mobile games
contributed

84.9%

of total mobile app
revenues in South
Korea in 2018.



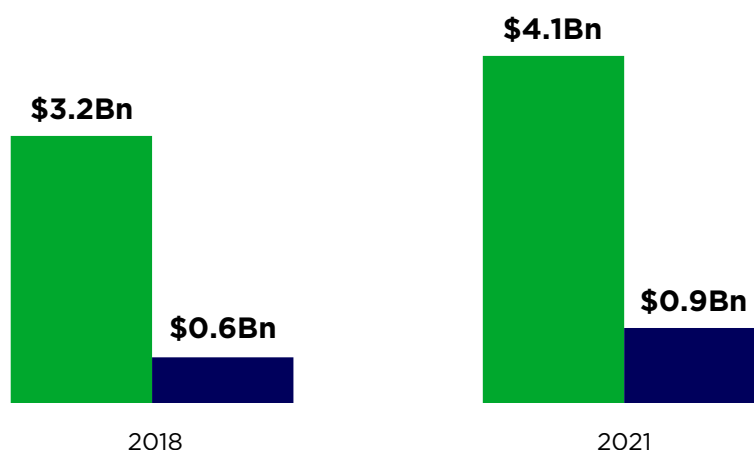
GAMES ARE DOMINATING THE APP MARKET

OVERVIEW OF THE MOBILE MARKET IN SOUTH KOREA

TOTAL SOUTH KOREAN MOBILE APP REVENUES

2018 & 2021

● Game Revenues ● Non-Game Revenues



+9%

CAGR 2018-2021 of the South Korean mobile app market.

Compared to China and Japan, South Korea had the highest share of game revenues in its app economy in 2018. In fact, almost 85% of total app revenues came from games. This share will decrease slightly to 82.3% in 2021 but will remain the highest among the three markets.



SOUTH KOREA WAS THE WORLD'S FOURTH-LARGEST MOBILE GAMES MARKET IN 2018, AFTER CHINA, THE UNITED STATES, AND JAPAN.



MOBILE GAMERS SPEND ON RPGS

STRATEGY GAMES HAVE HUGE GROWTH POTENTIAL

TOP 10 iOS GENRES IN 2018

By revenues and by number of downloads

#	BY REVENUES	BY DOWNLOADS
1	Role Playing	Action
2	Action	Arcade
3	Strategy	Role Playing
4	Simulation	Simulation
5	Adventure	Puzzle
6	Arcade	Adventure
7	Puzzle	Strategy
8	Sports	Board
9	Board	Family
10	Card	Sports

STRATEGY

games are among the fastest-growing mobile game genres in South Korea.

Like other Asian markets, mobile RPGs are very well-received in South Korea. Mobile strategy games are as popular, but there are not many titles in the market. The disparity between the popularity of strategy games and the availability of high-quality titles in the genre has led to an increase in the number of strategy games being published.













19% OF SOUTH KOREAN MOBILE GAMERS INDICATE THAT THEY ENJOY PLAYING STRATEGY GAMES—THE SAME SHARE AS FOR MOBILE ROLE-PLAYING GAMES.



LOCAL GAME PUBLISHERS LEAD THE MARKET

BUT THERE ARE OPPORTUNITIES FOR FOREIGN COMPANIES

TOP 10 GROSSING iOS GAMES IN 2018

#		GAME	GENRE	PUBLISHER
1		Lineage 2 Revolution	Role Playing	Netmarble
2		Black Desert Mobile	Role Playing	Pearl Abyss
3		Lineage M	Role Playing	NCSoft
4		Modoo Marble	Arcade	Netmarble
5		The King	Strategy	Chuang Cool
6		Ragnarok M	Role Playing	GRAVITY
7		Seven Knights	Role Playing	Netmarble
8		Three Kingdoms M	Strategy	Efun
9		Clash Royale	Strategy	Supercell
10		MARVEL Future Fight	Role Playing	Netmarble

3/10

of the top-grossing iOS games are published by foreign companies. Interestingly, all three are strategy games.

South Korean mobile gamers favor IP-based titles. Within the top 10 iOS games by revenues, Lineage, Black Desert, Ragnarok, Three Kingdoms, and Marvel are all well-known IPs in South Korea. With the longstanding popularity of PC gaming and the continuous shift to mobile games, mobile adaptations of successful PC franchises also find their way into the market.













MORE THAN 10% OF TOTAL MOBILE GAME REVENUES IN SOUTH KOREA CAME FROM NETMARBLE IN THE FIRST HALF OF 2018.



KOREANS ARE LIKELY TO PAY FOR CONTENT

NETFLIX AND YOUTUBE ARE AMONG THE MOST POPULAR APPS

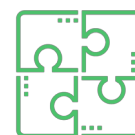
TOP 10 GROSSING NON-GAME APPS ON iOS IN 2018

#		APP	GENRE	PUBLISHER
1		KakaoPage	Books	Kakao Page
2		KakaoTalk	Social Networking	Kakao
3		POOQ	Video	POOQ
4		Netflix	Video	Netflix
5		Melon	Music	Kakao M
6		YouTube	Video	Google
7		SERIES	Books	NAVER WEBTOON
8		Naver Webtoon	Entertainment	NAVER WEBTOON
9		WATCHA PLAY	Video	Frograms
10		Bugs	Music	NHN BUGS

2/10

of the top non-game apps on iOS are from the West: Netflix and YouTube.

Similar to China and Japan, South Korea has its own unique chat app: KakaoTalk. In fact, Kakao dominates the South Korean mobile market as much as Tencent does in China. Kakao owns the largest social network platform and mobile payment solution in South Korea. The company also publishes games.



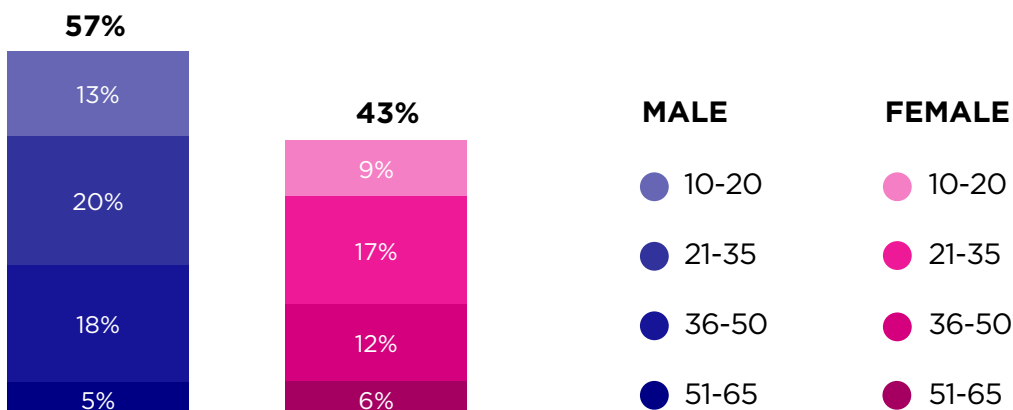
KAKAO CONTRIBUTED NEARLY HALF (45.5%) OF TOTAL REVENUES GENERATED BY THE TOP 10 APPS IN 2018.



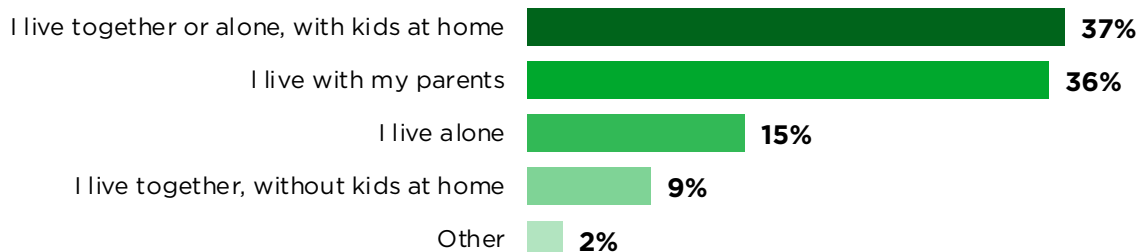
KOREAN MOBILE GAMERS ARE OLDER

COMPARED TO CHINA AND JAPAN

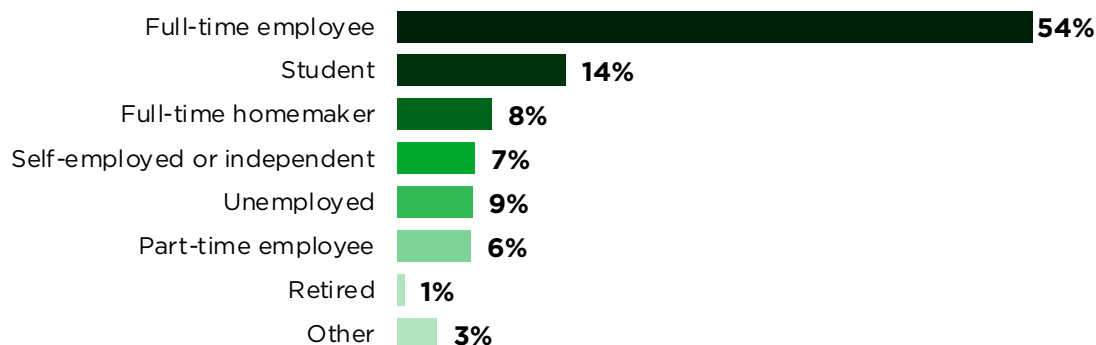
AGE-GENDER SPLIT



HOME SITUATION*



WORK SITUATION*



Base: mobile players aged 10-65.
* Respondents aged 10-15 do not get questions about their home and work situations.



KOREAN GAMERS ARE BIG SPENDERS

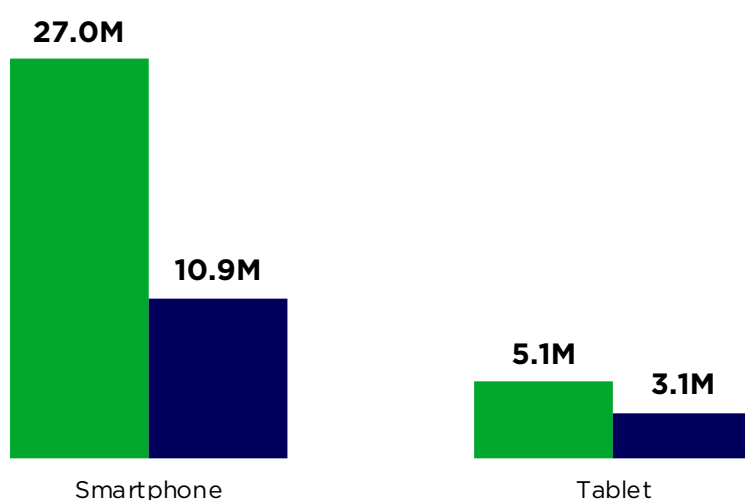
POWER-UPS ARE THE MOST POPULAR IN-GAME ITEM

NUMBER OF MOBILE PLAYERS AND PAYERS | 2018

Smartphone & Tablet

● Players

● Payers





40%

of South Korean smartphone players spent money on games in 2018.

Newzoo's Consumer Insights suggests that South Korean mobile payers are mostly likely to spend on power-ups (41%), playable characters (38%), and cosmetics/skins (35%). Compared to the Chinese and Japanese mobile game payers, the South Koreans are the least willing to spend on DLC/expansion packs.

ARPPU & CONVERSION RATE* iOS and Android | October 2018

		
ARPPU	\$32.4	\$36.4
Conversion Rate	3.2%	3.0%

 deltaDNA

*The metrics are calculated for individual games separately in each market. Across these games, the 75th percentile score is calculated.

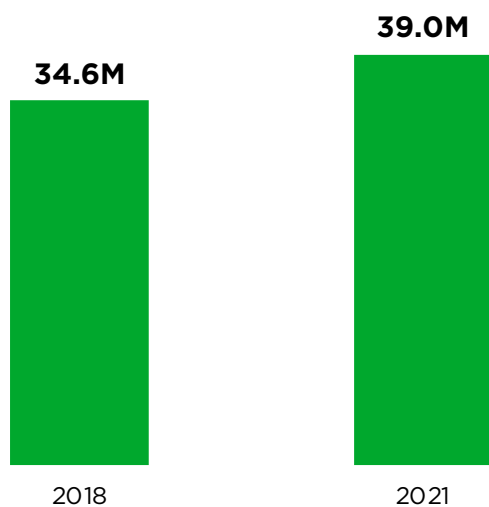


HIGHEST SMARTPHONE PENETRATION IN ASIA

NUMBER OF SMARTPHONE USERS IN 2018 AND FORECAST TOWARD 2021

NUMBER OF SMARTPHONE USERS

2018 & 2021



+4.1%

CAGR 2018-2021 of the number of smartphone users

68%

Smartphone penetration rate in South Korea in 2018.

South Korea had the highest smartphone penetration among the three markets in 2018. In fact, it was the world's #11 smartphone market by penetration rate in 2018 and the largest in Asia. The number of smartphone users will grow to 39.0 million in 2021 with a penetration rate of 75.5%.



SOUTH KOREA HAD THE HIGHEST SMARTPHONE PENETRATION RATE IN ASIA IN 2018.

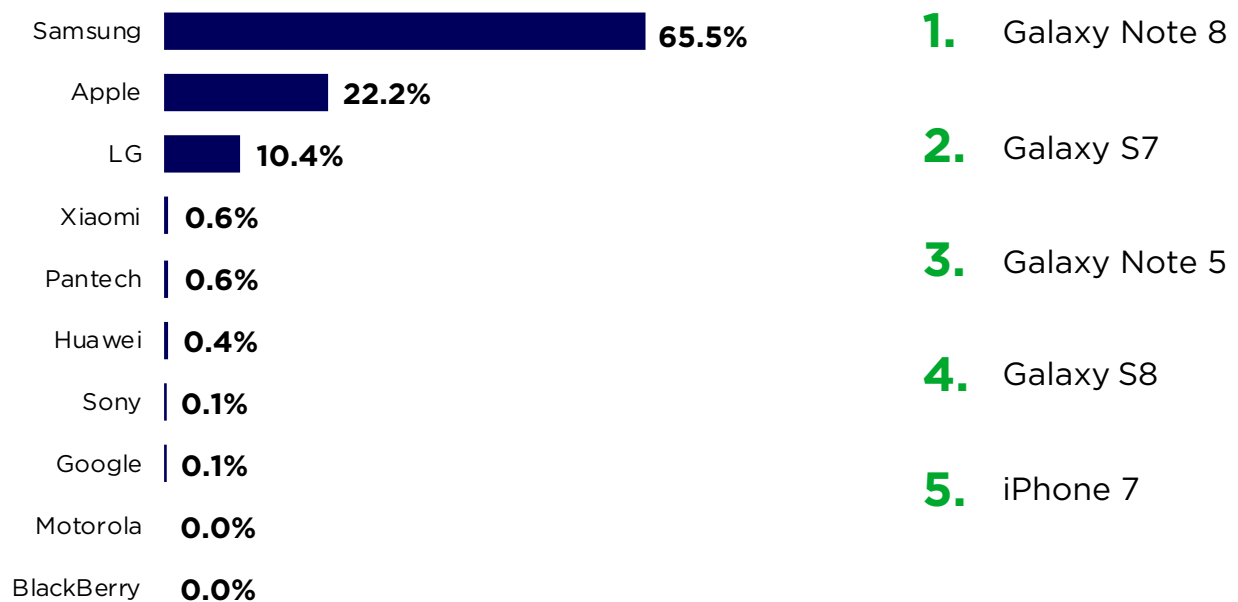


WITH SAMSUNG DOMINATING ITS HOME MARKET

TOP DEVICES | SMARTPHONE AND TABLETS COMBINED

TOP MOBILE BRANDS & MODELS

By monthly active users | October 2018



2/3

active devices in October 2018 were Samsung.

Samsung dominates its home market, with Apple claiming only 22.2% market share in October. Despite Samsung's popularity, South Korea accounted for just 3.0% of all active Samsung devices globally. This is largely due to the country's low population. China was Samsung's largest market (5.5%) among the three, with Japan accounting for a mere 0.4% of all active Samsung devices in the world.



**MORE THAN HALF (53.9%) OF
ACTIVE SMARTPHONES IN
SOUTH KOREA WERE HIGH-END*
AS OF OCTOBER 2018.**

*High-end device split is based on CPU performance according to widely used (geekbench multicore) benchmark tests. High-end devices perform at least two standard deviations better than the median benchmark score.



SUMMARY AND KEY TIPS

SOUTH KOREA HAS THE LOWEST BARRIER TO ENTRY AMONG THE THREE

More than half (52.8%) of South Korea's total population played games on their smartphones in 2018. With total revenues of \$3.2 billion, South Korea is the fourth-biggest mobile games market in the world. South Korea also has huge growth potential; revenues increased by +23.1% from 2017 to 2018, making the Korean mobile games market one of the fastest-growing in the world.

MMORPG is the most popular genre among Korean mobile gamers. The genre is a large contributor to mobile game revenues with six of the top 10 grossing iOS games being MMORPGs in 2018. Strategy is the second-most-popular mobile genre in South Korea. Games with classic IPs, such as Lineage and Three Kingdoms, are favorites among Korean mobile gamers.

The mobile games market in South Korea is dominated by local publishers, namely, Netmarble, NCSOFT, and NEXON. These big names somehow make South Korea a relatively exclusive market for foreign game companies to enter.

THE KAKAO EMPIRE

Of the top 10 grossing non-game apps on iOS in 2018, three belonged to Kakao. Formerly known as KakaoTalk, the corporation has become one of the largest Internet companies in South Korea, with a diversified business portfolio ranging from finance to entertainment. Kakao's business model is interesting to look at, as the company evolved quickly from a chatting tool to a synthesized multi-channel mega-group. In fact, KakaoTalk is the #1 communication app in South Korea both in terms of market share and number of users. KakaoTalk leveraged its large user base to other apps like Kakao M, showing the company's ambition to be the leader in South Korea's entertainment industry.

Kakao also developed KakaoGame, which has become a major channel for gamers to download mobile games, second only to Google Play. Notably, word of mouth on KakaoTalk is very powerful; it is the primary reason for Korean gamers to try new games.

KEY TIPS FOR WESTERN PUBLISHERS

As a highly active and competitive market, South Korea is constantly dominated by local, big-name publishers such as Netmarble, NCSOFT, and NEXON. Nevertheless, it is still the most open market compared to China or Japan. Taking advantage of social media's distribution capabilities, with special attention to KakaoTalk, Western publishers should be able to reach many potential gamers.

ABOUT MINTEGRAL

Mintegral is one of the leading mobile advertising platforms in Asia. Driven by AI technology it provides user acquisition and monetization solutions to advertisers and mobile developers worldwide.

Mintegral brings together the Eastern and Western markets for mobile games and apps, simplifying the challenge of cross-regional mobile app marketing. Mintegral leverages rewarded video, native video, 3D video, playable ads and other interactive creatives to help improve engagement rates and drive higher ROI.

With unmatched expertise in launching and marketing apps in the APAC region, Mintegral is already helping thousands of app developers and publishers bridge the gap between the East and West.

Mintegral International Ltd is headquartered in Beijing, China, with offices in the US, Europe, India and Japan.

Find out more at www.mintegral.com.

Global Business & Global Reach



2,000+

Partnered Advertisers



1,000+

Partnered Publishers



950M

DMP's DAU



320M

SDK's DAU



200+

Countries & Regions



5,000+

Partnered Apps

ABOUT NEWZOO

As the number one provider of games and esports analytics in the world, we empower people to explore change, create unique strategies, and optimize their daily business.

OUR USE CASES (SOLUTIONS)



EXPLORE

- Trends
- Industries
- Markets
- Forecasts



CREATE

- Strategies
- Business plans
- New products
- Target groups



OPTIMIZE

- Marketing
- Investments
- Product dev
- Local efforts

OUR EXPERTISE

CONSUMER INSIGHTS

Understand your most valued consumers' drivers, attitudes, and behavior. Segment your audience across 28 countries/markets using more than 200 variables.

TRACKING DATA

Metrics that come straight from the source. Track your market and optimize marketing and product development while keeping an eye out for blue-ocean opportunities.

MARKET FORECASTS

Our landmark reports. In-depth market forecasts and trends ensure you never miss an opportunity. Includes quarterly updates and access to our forecast dashboards.

Get in touch to learn more about
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Email:
questions@newzoo.com



Insights into:

Asia's Top Mobile Markets

China, Korea, Japan



Mintegral