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Inside China:

Key Insights for Unlocking This
Mobile-First Market

The Key Mobile Insights Into China

- #1 The number of smartphone users in China is unparalleled — and there is room to grow.

- #2 China relies on smartphones more than any other country.

- #3 eCPMs are the highest in Asia, showing how valuable Chinese users are.

- #4 Homegrown Chinese apps dominate while big Western publishers try to crack the market.

- #5 The Android app stores in China remain as fragmented as ever.

- #6 Advertisers and publishers always need to play by the local rules.

- #7 Trusted, transparent partners are needed to navigate the opaque ad tech ecosystem.

What Advertisers and Publishers Need to Know About China

China is not expected to become the world's largest economy for at least 15 years,¹ but the country is already the **world's largest app market**.² The vast scale of China's app market, coupled with its incredibly fast growth, represents enormous opportunities for advertisers. However, with these opportunities come challenges due to the complexities of the market. These challenges are especially big for app publishers looking to enter China.

Tapping into China's mobile economy requires a full understanding of what makes the country and its 690 million smartphone users different than other markets.³ What might be an effective strategy in the West could fail to make an impact in China. With this in mind, **publishers and advertisers need to understand what makes China so unique for mobile advertising**.

This report and the actionable insights it provides will help any advertiser or publisher gain a better understanding of the mobile trends shaping China.

Key Facts About China



Source: ¹Bloomberg News, December 2017 | ²App Annie, January 2018 | ³eMarketer, October 2018 | ⁴eMarketer, September 2018 | ⁵GSMA Intelligence, 2017

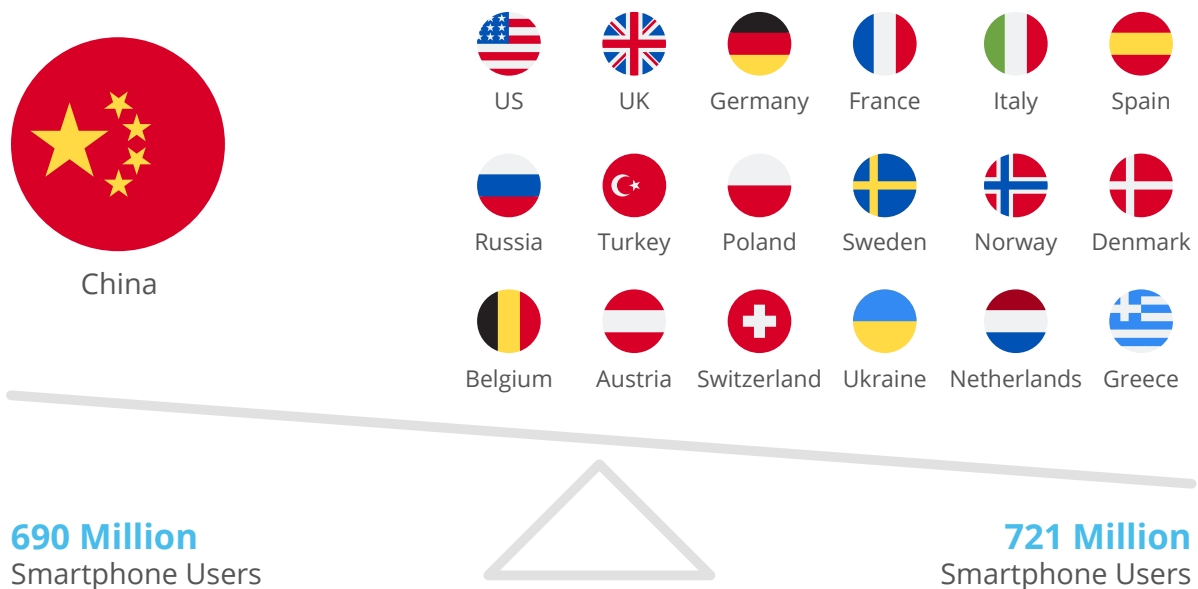
The number of smartphone users in China is unparalleled — and there is room to grow.

One of China's distinctive features is the scale that the country offers. Much has been written about the ambitious public infrastructure projects, the rapidly-growing cities, and the enormous economic growth that the country has been experiencing. You can also see that sense of scale when it comes to mobile devices.

With China being the world's most populous country, it might not be a shock that the nation has the highest number of smartphone users in the entire world. To really get a sense of that scale, you have to compare China's user base to the rest of the world.

Mobile Math

Smartphone Users in China vs. All Smartphones Users in the US and Europe



Source: eMarketer, 2018

What is most impressive about China's enormous smartphone user base is that there is still room for those numbers to grow. Right now, China is below most Western countries and a couple of its APAC counterparts when it comes to smartphone user penetration.

That will not last long. China's smartphone industry is projected to grow far faster than the more mature markets. By 2022, China will surpass Germany and Japan in smartphone user penetration rate. At that time, the 86.7% smartphone penetration rate in China will rival the US.

China's Mobile Internet Penetration Is Rising Quickly Compared to Key Markets

Share of Population Using a Mobile Device

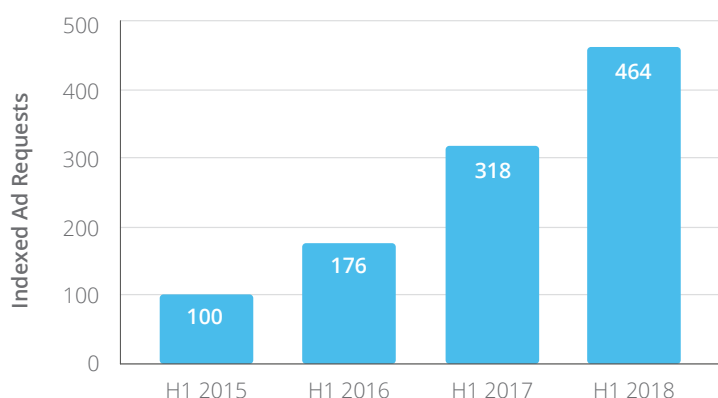
Country	2018	2019	2020	2021	2022
China	72.6%	76.7%	80.6%	84.2%	86.7%
Germany	82.2%	83.4%	84.0%	84.5%	84.7%
India	54.0%	57.8%	61.3%	64.9%	68.0%
Japan	77.3%	78.1%	79.0%	79.8%	80.4%
South Korea	89.9%	90.7%	91.3%	91.8%	92.3%
United States	86.4%	88.1%	88.9%	89.3%	89.5%

Source: eMarketer, April 2018

This increased smartphone penetration rate can be seen in the growing number of ad requests on the Smaato platform. The drastically-increasing number of ad requests year-over-year show just how much more widely-used smartphones are becoming. The growth has been impressive, but smartphone usage rates still have not reached their full potential.

Smartphone Usage in China Is Growing Fast

Indexed Ad Requests in China



Source: Smaato Publisher Platform (SPX)

The smartphone penetration rate projections for the next few years in China are optimistic. However, it is conceivable that smartphones will become even more widely adopted than expected. Regulations passed in 2018 by the Chinese government eliminated roaming charges between the nation's provinces. This dropped mobile data prices in half.⁶ With cheaper data prices and a variety of low-cost smartphones available, the penetration rate will be seeing strong growth in the coming years.

Source: ⁶TechNode, July 2018

Insight #2

China relies on smartphones more than any other country.

Smartphones are important to consumers around the world, but that is especially true in China. For example, a restaurant might not offer a physical menu at all. Instead, customers scan a QR code at the table to access a digital menu where they can make an order while automatically paying — even streetside vegetable vendors often only accept mobile payments. In China's fastest-growing coffee chain, Luckin Coffee, orders can only be made through the company's mobile app. In short, phones are an all-in-one device used for just about everything.

Average Number of Installed Apps per Phone

103
in China

102
in Japan

95
in the US

88
in the UK

78
in India

Source: App Annie, January 2018

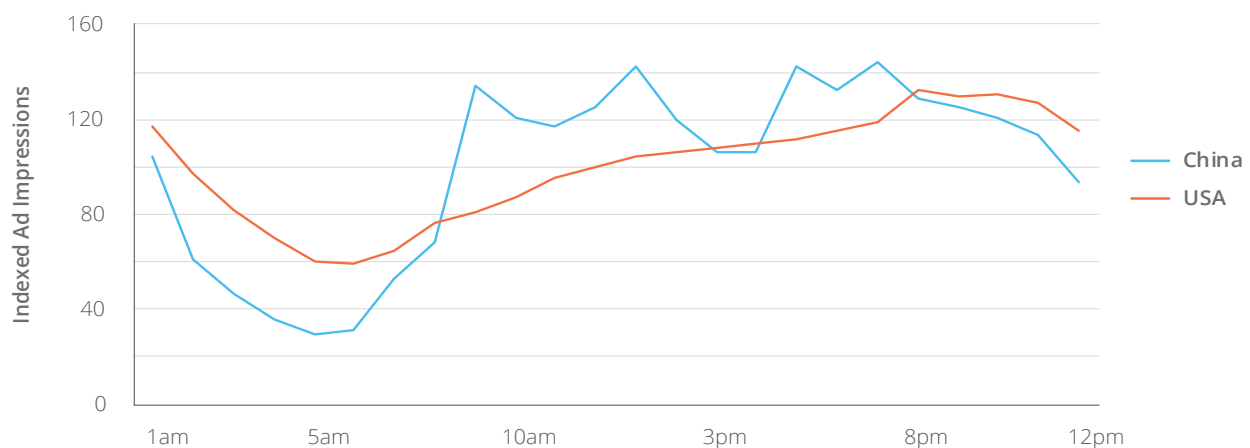
Statistics show just how ingrained smartphone usage is within China. In 2018, the average person in China spent 2 hours and 40 minutes on their smartphones per day, which is +9% more time than the US.⁷ That gap will widen in years to come, as daily smartphone usage is expected to rise by double-digit percentages in China.

Not only do Chinese smartphone users spend more time on their phones than their US counterparts, but another difference is when they use their phones the most. While the US sees a steady increase in ad impressions from the morning to the prime time evening period before leveling off, the peaks in China are much higher. In the morning, phone usage is at its highest point of the day. Understanding this can help advertisers reach users when they're most engaged.

Did You Know?

There are more mobile payment users in China than the rest of the world combined.⁸

Peak Smartphone Usage Differs in China



Source: Smaato Publisher Platform (SPX), H1 2018

Source: ⁷eMarketer, April 2018 | ⁸eMarketer, July 2018

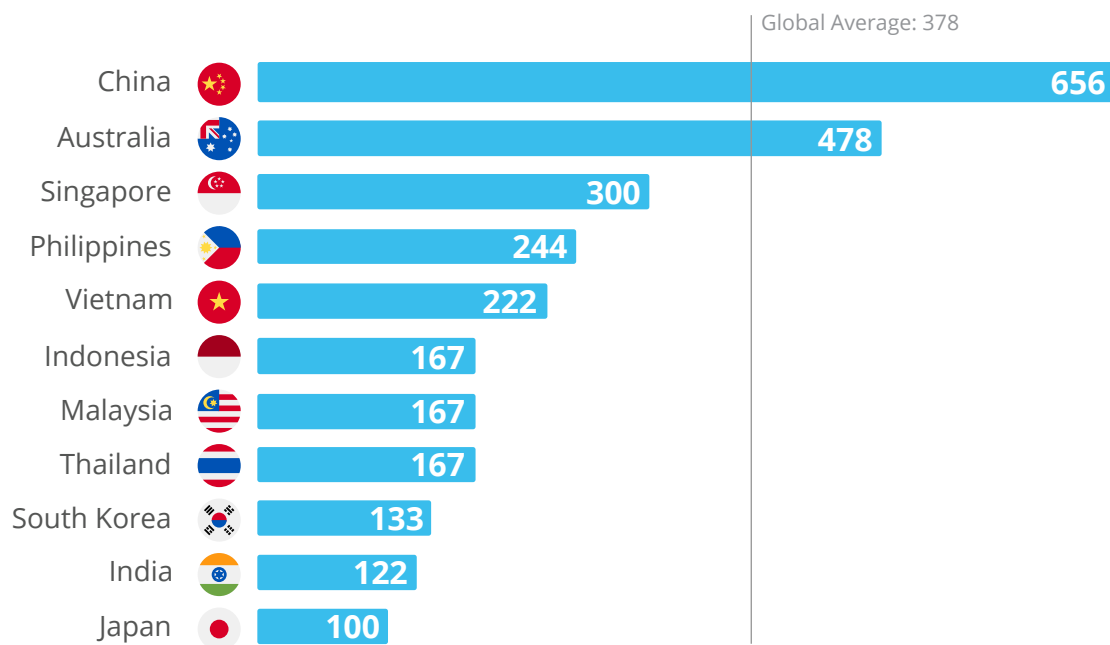
eCPMs are the highest in Asia, showing how valuable Chinese users are.

While countries such as South Korea and Japan might be wealthier on a per person basis than China, China is only behind the US for the nation with the highest gross domestic product (GDP). Another area where China leads the region is in a key mobile advertising indicator: eCPM.

What Is eCPM?

The effective cost per mille (eCPM) is the amount advertisers pay to reach 1,000 impressions. This measurement can be used to show how valuable an app, a user segment, or in this case a country, is.

eCPMs Across APAC (Indexed)



Source: Smaato Publisher Platform (SPX), H1 2018

The heavy usage rates and ubiquity of smartphones means a wide variety of people can be reached by advertising. Meanwhile, there is the underlying trend of growing spending power that also makes the Chinese audience so valuable.

It is projected that by 2022, 61% of China's urban households will be considered upper-middle class or higher.⁹ Rising wages means more spending power, so advertisers should try to attract these potential customers. In 2012, the year the iPhone 5 first launched worldwide, just 17% of urban households were regarded as upper-middle class or higher.¹⁰

With brands increasingly competing against each other to reach Chinese consumers, eCPMs in China will likely remain high for years to come. This is an especially big opportunity for publishers, as an app popular in China can leverage these high eCPMs.

Source: ⁹McKinsey & Company, June 2016 | ¹⁰McKinsey & Company, June 2016






Homegrown Chinese apps dominate while big Western publishers try to crack the market.

Within China, some of the biggest technology companies in the world are blocked by the government or willingly choose to withdraw instead of complying with strict censorship controls. Among those without a presence in China are Google (including YouTube), Facebook (including Instagram and Whatsapp), and Twitter. Without these international players, homegrown Chinese services have taken over.

Category	Popular Apps Outside of China	Popular Apps in China
Social Media	Twitter Facebook Instagram	Sina Weibo TikTok QZone
Messaging	WhatsApp Messenger SnapChat Line	WeChat QQ Momo
E-Commerce	Amazon eBay	TaoBao JD.com
Mobile Payments	PayPal	Alipay WeChat Pay
Web Searches	Google	Baidu 360 Sogou
Video	YouTube	Tencent Video Youku iQiyi

While many of the popular apps in China can be compared to a Western counterpart, most of these local apps offer a variety of functions that go beyond their Western counterparts. The most popular app by far is WeChat, which can be described as a messaging service, but it also offers mobile payments, a marketing platform for brands, and even a dating function.

China's Most Popular Apps in 2018

Rank	App	Name in Chinese	Publisher	Monthly Active Users (Millions)
1	 WeChat	微信	Tencent	929.9
2	 Alipay	支付宝	Alibaba	679.7
3	 QQ	QQ	Tencent	565.8
4	 Mobile TaoBao	淘宝网	Alibaba	551.6
5	 iQiyi	爱奇艺	Baidu	527.3

Source: QuestMobile, June 2018

The Power of BAT

BAT is the abbreviation for the three Chinese technology behemoths — Baidu, Alibaba, and Tencent. Baidu Inc, established in 2000, dominates the search engine market in China, much like Google does elsewhere in the world. Alibaba Group, founded by Jack (Yun) Ma in 1999, is not only China's but also the world's biggest online commerce company. Its financial service provider Alipay is a Chinese equivalent of PayPal, but provides far more comprehensive services. It was first introduced as a third-party transaction platform for buyers and sellers on Taobao, Alibaba's B2C platform (similar to Amazon or eBay). Tencent Holdings, the Chinese internet giant behind the WeChat messaging app, was founded in 1998 and became China's leading social media company. Tencent has a strong presence in social networks, entertainment, payments, utilities, cloud services, and AI technologies.

Some of the big blocked Western tech companies are seeking alternative ways of breaking into China with varying degrees of success. Facebook, which has long been trying to gain a foothold in China, made progress in July 2018 when they received government approval for a \$30 million "innovation hub." A day after Facebook announced the development, the Chinese government rescinded the approval for the subsidiary.¹¹

Google is taking a different route by investing directly into Chinese companies. The biggest such investment was \$550 million into JD.com, China's second-largest e-commerce firm.¹² They are also working to bring a censored version of its search engine to China, although it remains to be seen when or if this happens.

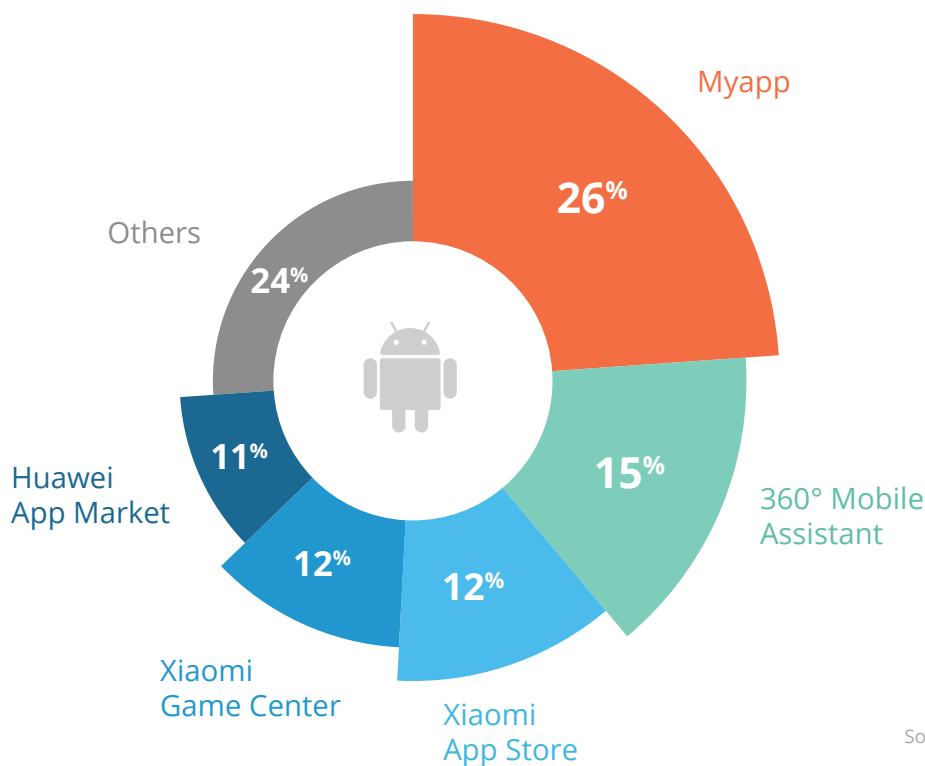
Source: ¹¹News.com.au, July 2018 | ¹²Techcrunch, June 2018

The Android app stores in China remain as fragmented as ever.

Android phones dominate the market with a 75% market share compared to 22% for Apple's iOS.¹³ What makes things complicated for publishers outside of the country is that the Google Play Store is blocked in China, so hundreds of fragmented Android stores compete to fill in the void.

Many of these stores are created by the smartphone manufacturers (e.g. Huawei, Xiaomi, Vivo, and others), which come pre-bundled with the phones. Many of these stores are extremely small in terms of coverage, but there is also no clearly dominant app store. Myapp, created by Tencent, remains the biggest store with a 24% market share in Q2 2018. Following Myapp are several stores with double-digit coverage.

China's Fragmented Android Stores



Source: Newzoo, April 2018

This fragmented app store landscape is not ideal for app publishers. Gaining access to each store requires finding a local distribution service provider to navigate the complicated process. It is not a perfect situation and it puts foreign publishers at a disadvantage. Meaningful consolidation of China's Android app stores is unlikely to happen anytime soon.

Source: ¹³Statcounter, June 2018

Advertisers and publishers always need to play by the local rules.

The strict governmental controls on the internet, colloquially known as the “Great Firewall of China,” are plentiful. This series of regulations is why even some of the biggest tech companies are not present in China, and the rules have been regularly updated to coincide with new technological trends.

Just because some big tech players were unable or unwilling to play by the rules does not mean that other advertisers and publishers can not. The rules can be burdensome but navigating the framework is possible. The government passed two different measures in 2016 that affect advertisers and app publishers. Here are a few of the things to expect:

Playing by the Rules in China

FOR APP PUBLISHERS

App publishers cannot use their apps to negatively impact national security, distribute illegal content, or “upset social order.”

Publishers must authenticate the identities of their users and tie these online profiles to real citizen ID cards.

Publishers have to ensure that the in-app content doesn't infringe on intellectual property rights of others.

Receive clear consent from users when it comes to collecting data such as geographic locations, camera access, and other functions.

FOR ADVERTISERS

All advertisements shall, in the words of the government, “conform to the requirements of the construction of socialist spiritual civilization and the development of the fine traditional cultures of the Chinese nation.”

Ads must be honest, clear, and understandable. That includes an ad's descriptions of a product's performance, origin, price, and more.

Advertisers cannot engage in “deceptive or disruptive online advertising tactics,” such as showing pop-up ads requiring more than one click to close.

Advertisers cannot use “unfair competitive methods” like interfering with the display of competitors' advertisements.

As you can see, some of the regulations are straightforward while others are a little more unclear. However, there is some overlap when it comes to the guidelines provided by ad tech companies and app stores.

Trusted, transparent partners are needed to navigate the opaque ad tech ecosystem.

Ad tech ecosystems around the world can be difficult to grasp. In China, things are especially opaque. The Chinese ad tech landscape is very different from the Western world. Most programmatic players typically “play both sides,” reports Digiday.¹³

It works like this: a supply-side platform (SSP) might build a demand-side platform (DSP) and then earn a percentage of revenues from each side. It is also not uncommon for a company to own a DSP and then an ad network consisting of their own traffic and inventory. The word “DSPAN,” which means a combined DSP and an ad network, was created to address these situations.¹⁴

This makes transparency sometimes difficult to come by beyond the language and cultural barriers that come with working with international partners. While there has been progress when it comes to transparency, trusted partners are needed in order to navigate this complicated ecosystem.

A Snapshot of China's Ad Tech Landscape



Source: ¹³Digiday, September 2017 | ¹⁴RTB China, September 2017

What Is Next?

The opportunities within China are unparalleled. The growing number of mobile users and the enormous size of the app market is a dream come true for advertisers and publishers. These mobile megatrends have created the perfect storm of conditions to grow revenues.

As great as those opportunities are, the challenges are also plenty. From navigating the ad tech ecosystem to understanding the latest government regulations, publishers and advertisers have to be prepared. Smaato can help you reach your goals. With our APAC offices in Singapore and Shanghai, we have the connections and experience needed to succeed in China.

For advertisers, Smaato is a key player for demand partners looking to get in on the in-app game. The precise targeting parameters available within the Smaato Demand Platform (SDX) make it simple for advertisers to identify and target their ideal audience. Find out more at www.smaato.com/advertisers.

For publishers, the Smaato Publisher Platform (SPX) provides a free ad server, an RTB ad exchange, ad network mediation, private marketplace options, and the ability to bring publisher-owned ad network connections. With 450+ demand partners, we can help monetize your app within China and across the world. Learn more and create your free account at www.smaato.com/publishers.

Thank You

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About Smaato

Smaato is one of the leading global real-time mobile advertising platforms, connecting 10,000+ advertisers — including 91 of the Top 100 Ad Age brands — with over 90,000 app developers and mobile web publishers. Smaato manages up to 19 billion mobile ad impressions daily and reaches over one billion unique mobile users monthly. Founded in 2005 by mobile pioneers Ragnar Kruse and Petra Vorsteher, Smaato has global headquarters in San Francisco, California, with additional offices in Berlin, Hamburg, New York City, Shanghai, and Singapore. Learn more at www.smaato.com.



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