

*App Annie*

# App Annie Market Forecast 2016–2021



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# Key Findings

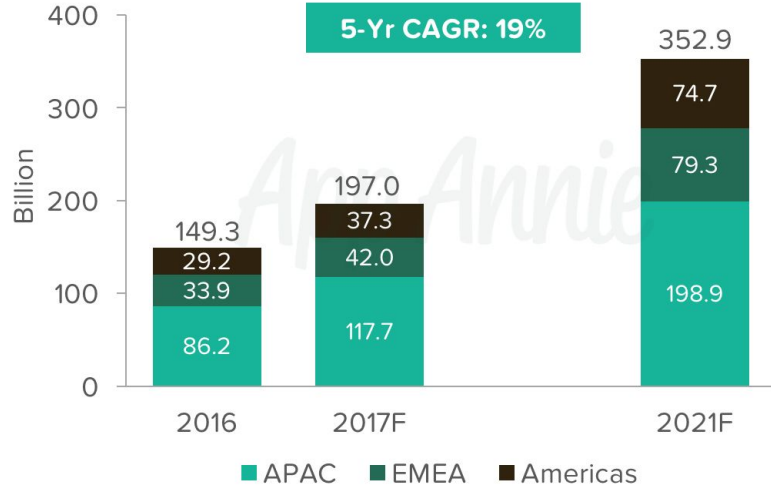
- App Annie expects worldwide mobile app store downloads to exceed 352 billion in 2021, with gross consumer spend across all app stores to surpass \$139 billion.
- The iOS App Store is projected to remain the single most lucrative app store through the forecast period, generating more than \$60 billion in gross consumer spend in 2021. However, the combined consumer spend on Google Play and third-party Android stores is expected to overtake it in 2017 thanks to their dominant smart device market share and strong installed base growth.
- China will continue to be the largest market for global mobile app store spend, exceeding \$56 billion in 2021. Meanwhile, rapid smartphone adoption throughout Southeast Asia is fueling downloads, with India's downloads approaching 23 billion in 2021.
- Gross consumer spend on games via all mobile app stores should exceed \$105 billion in 2021. Spend on apps (excluding games) in categories like news, media and dating apps is forecast to grow significantly faster and hit \$34 billion in 2021.

Note: Revenue reported in this document is inclusive of consumer spend (versus net revenue paid to publishers) on mobile apps via all app stores globally; downloads represent initial installs to mobile devices via all mobile app stores globally. Revenue processed outside of app stores like commerce and advertising is not included in this forecast.

# Mobile App Store Revenue to Exceed \$139B in 2021

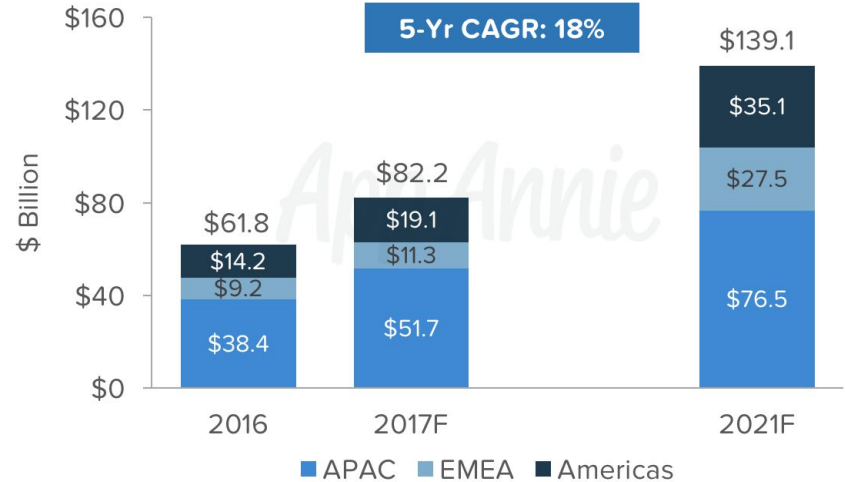
## Mobile App Forecast – Annual Downloads

By Region, in Billions



## Mobile App Forecast – Annual Revenue

Gross Consumer Spend, By Region, in Billions

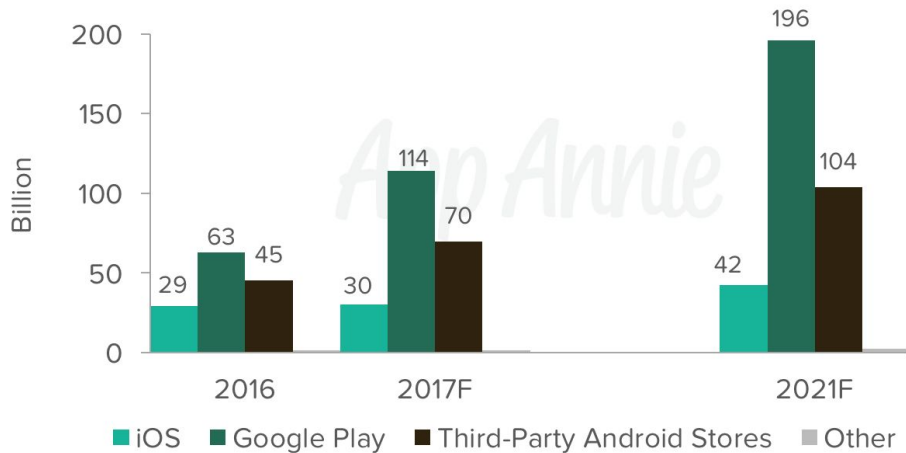


- Global mobile app store downloads across all stores is forecast to increase at an annualized growth rate of 19% to hit 352 billion in 2021, while global spend grows at 18% to reach \$139.1 billion in 2021. App store growth is impressive, yet store revenue is one piece of the app economy, with in-app advertising and mobile commerce revenue continuing their surge in parallel (not included in this report).
- APAC will remain the largest region by both downloads and revenue through 2021, with China leading the charge. With revenue per device of nearly \$105, Japan will remain one of the most lucrative markets while India's growth boosts downloads.

# iOS to Remain the Single Largest Store in Revenue While All Android Stores Combined Surpass iOS in 2017

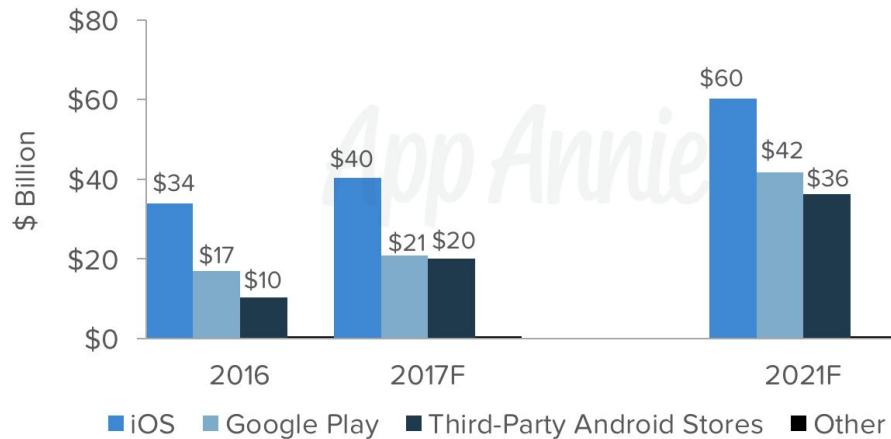
## Mobile App Forecast – Annual Downloads

Worldwide, By Store, in Billions



## Mobile App Forecast – Annual Revenue

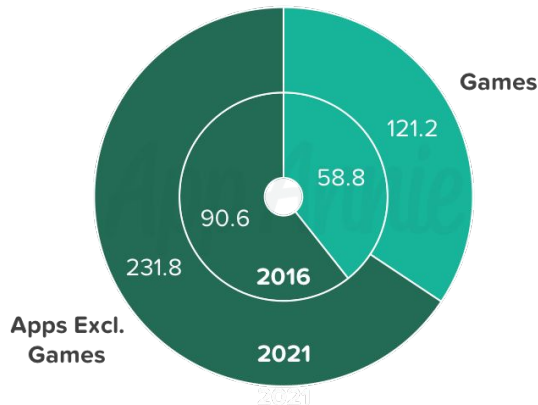
Worldwide, Gross Consumer Spend, By Store, in Billions



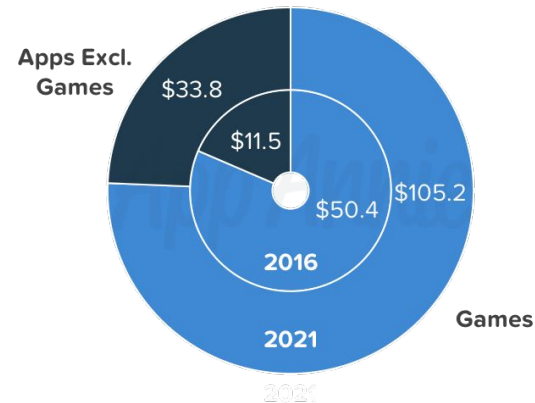
- Google Play and third-party Android stores are forecast to see downloads grow at an annualized rate of 23% to 299.9 billion by 2021, thanks to growing smartphone and app adoption in emerging markets, particularly India, Mexico, Brazil and Indonesia.
- iOS will remain the most lucrative app store through 2021, generating \$60.3 billion, thanks to growing revenue per device from Apple's comparatively affluent customer base. However, the combination of Google Play and third-party Android is forecast to exceed iOS in 2017 as the sharp growth in installed base of Android devices makes up for lower user purchasing power.

# Games Will Continue to Generate Bulk of Revenue in 2021, And Subscriptions Help Other Apps Grow at 25% CAGR Through 2021

**Mobile App Forecast – Annual Downloads**  
2016 vs. 2021, by Category



**Mobile App Forecast – Annual Revenue**  
Gross Consumer Spend, 2016 vs. 2021, by Category



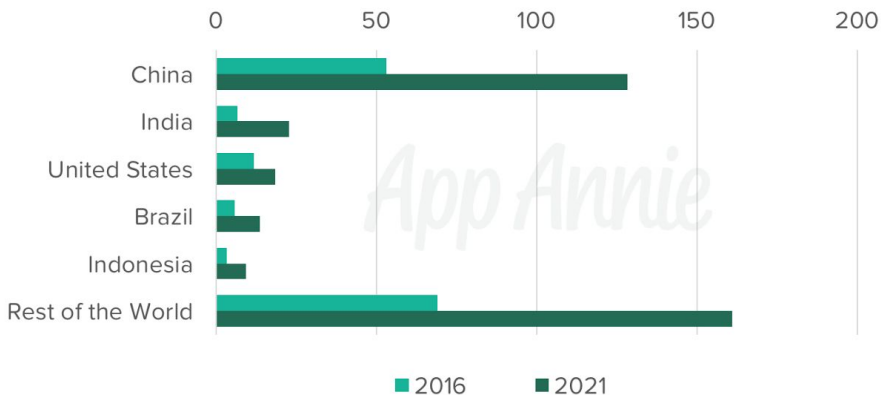
- In 2016, games represented 11% of time spent in Android apps and 39% of all app downloads, yet generated 81% of consumer spend via stores.
- Many non-game apps [monetize through advertising](#) or commerce. Revenue through these channels is even greater, but this revenue is outside of app stores in this report. However, in-app subscription revenue from apps related to media streaming, news and dating is routed through the app store revenue channel that we forecast to grow at an annualized rate of 25% — outpacing in-app purchase revenue from games — and reaching \$33.8 billion by 2021.

# Revenue Remains Concentrated Among Largest Markets, But Emerging Markets Drive Download Growth

## Mobile App Forecast – Top 5 Countries by Downloads

2016 vs. 2021

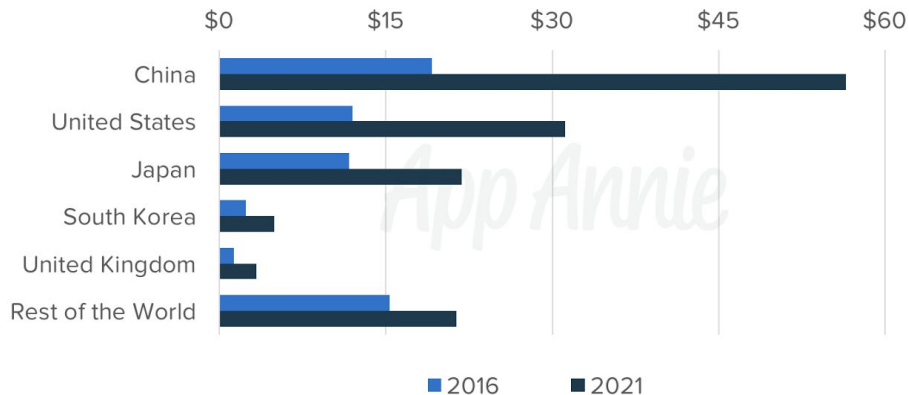
In Billions



## Mobile App Forecast – Top 5 Countries by Revenue

Gross Consumer Spend, 2016 vs. 2021

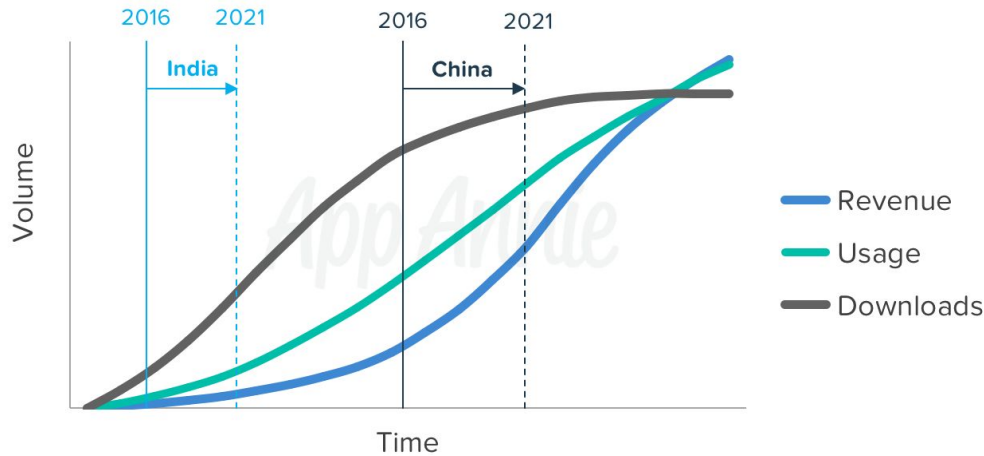
In Billions



- App store downloads are much more evenly distributed across countries as compared to revenue. In 2016, the top five countries represented 54% of worldwide downloads and this is expected to remain roughly static through 2021 as growth in China and India balances out growth outside the top five.
- Meanwhile, the top five countries represented a hefty 75% of the global revenue pie in 2016. This is expected to increase to 85% in 2021, due to increased spending on games and subscriptions from existing smartphone users in mature markets, primarily urban China, but also the United States, Japan and South Korea.

# Revenue Growth in China a Sign of Maturing App Market, While India Remains in Early Stages of Growth

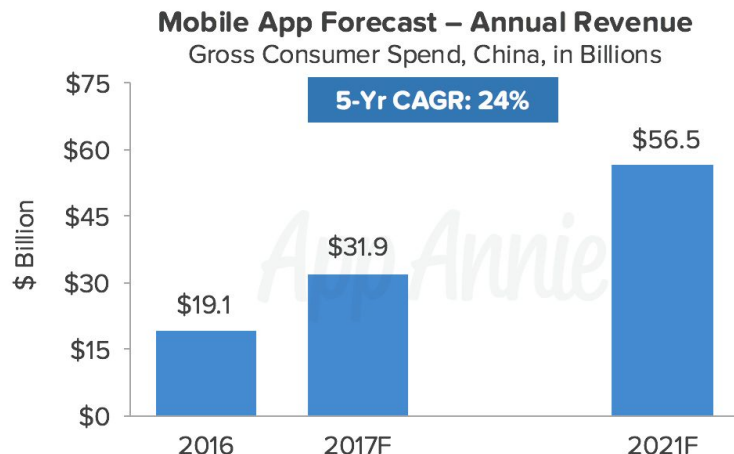
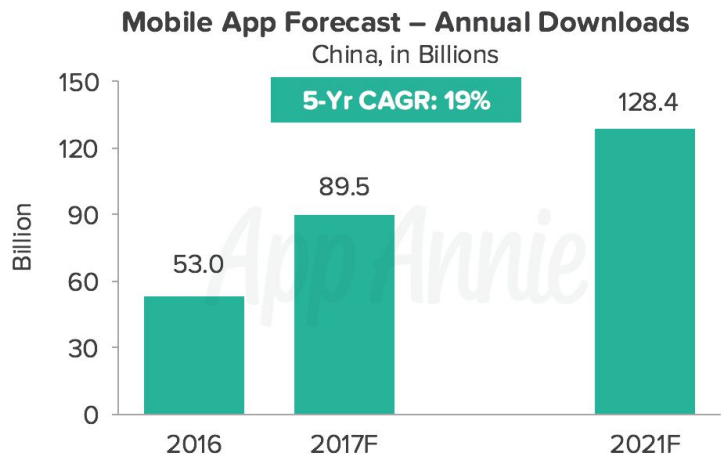
App Market Maturity Model



- In [last year's app store forecast report](#), we showed how app markets evolve over time. At inception, smartphone adoption kicks off strong growth in app downloads. As app usage grows and their value increases, users develop app habits which then leads to revenue growth through all channels: app store, advertising and commerce.
- We forecast that the majority of Chinese app users should settle into a habitual usage pattern by 2021, resulting in sustained revenue growth even as downloads slow.
- Despite some maturation occurring in India through the forecast period, it is projected to remain in early stages of this cycle, with sharp download growth and revenue expanding from a low base.

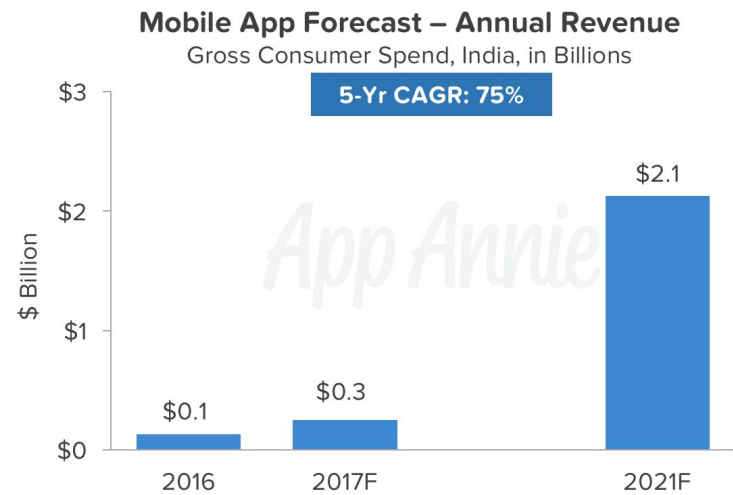
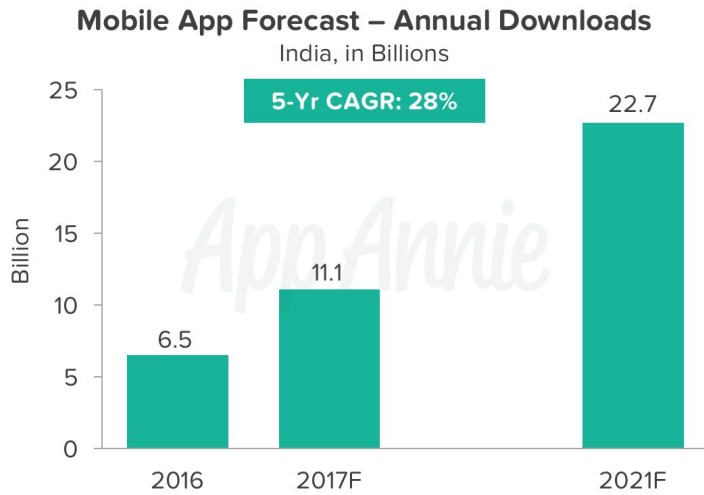


# “Cultural Surplus” and Relatively Strong Purchasing Power Drives App Store Revenue in China to \$56.5 Billion in 2021



- In China, we expect app store downloads to grow at an annualized rate of 19% while consumer spend grows at 24% from 2016–2021. Though smartphone adoption is reaching saturation in Tier 1 Chinese cities, much of China is still underpenetrated. Growing smartphone adoption in these regions will drive growth in app downloads over the forecast period.
- On the revenue side, China has a couple of unique advantages. [Purchasing power in China](#), while not as high as in mature markets, is still notably higher than other emerging markets. In addition, China bears a cultural resemblance with other mature East Asian markets when it comes to discretionary entertainment spend, notably on games. This combination of factors is forecast to lead to significant growth in per device app store spend, driving overall revenue growth.

# Smartphone Uptake Helps Downloads Grow 3.5x in India, but Lower Purchasing Power Limits App Store Revenue Potential



- India is poised for spectacular growth in smartphone ownership over the next five years. As a result, we expect app store downloads to grow at an annualized rate of 28% to nearly 23 billion by 2021.
- Given the recency of smartphone adoption, India is not yet driving material app store revenue. We expect app store spend to grow at a rate of 75% annually to \$2.1 billion in 2021, but its share of global spend is expected to remain under 2%. [Purchasing power](#) in India is significantly lower than mature markets and this is compounded by the fact that cultural norms favor saving over discretionary spend on gaming and entertainment.

# Recommendations for App Publishers

- **App publishers monetizing through app stores should continue to invest in mature markets**, as they will continue to see strong growth in gross app store spend per device. The top five mature markets is expected to account for 85% of global consumer spend in 2021, a key stat to keep in mind when planning growth strategies.
- Consumer spend on non-game apps should grow at 25% CAGR versus 16% for Games from 2016–2021. **App publishers in the media, news and dating verticals should increase their investments in subscription revenue models** as these categories are forecast to be the primary beneficiaries of this growth.
- Strong purchasing power and cultural factors will help China account for a staggering 41% of mobile app store consumer spend by 2021. **App publishers looking to enter China, particularly in gaming and entertainment, should focus on localization and partnerships** to bridge deep-rooted cultural differences with the West.
- In 2017, mobile game downloads in India are forecast to grow by 111%, while generating less than 1% of global consumer spend. Our forecast shows that **India has strong potential, but game developers will need to consider alternative monetization models, like advertising, to thrive in this market.**

# The Technology Behind the Report

App Annie helps companies build better app businesses and is used by 94 of the top 100 publishers across the globe. From competitive benchmarking to international expansion, we deliver the data and insights needed to succeed in the app economy.

The information contained in this report is compiled from [App Annie Intelligence](#), the leading market data solution for the app economy. To see how our app store data for download, revenue, demographic and usage estimates can help guide your critical business decisions, [request a demo today](#).



## EVALUATE & ASSESS

Identify market and investment opportunities by validating usage trends by country.



## ACQUIRE & GROW

Identify high-performing creatives and keywords to optimize organic and paid user acquisition efforts.



## DEVELOP & LAUNCH

Validate your app strategy and roadmap by analyzing the usage and demographic trends of key competitors by country.



## ENGAGE & MONETIZE

Monitor active user and revenue growth to identify high performing publishers.



## RETAIN & NURTURE

Increase retention and enhance app features based on user feedback and engagement metrics.

# About App Annie

App Annie delivers the most trusted app data and insights for your business to succeed in the global app economy. Over 800,000 registered members rely on App Annie to better understand the app market, their businesses and the opportunities around them. The company is headquartered in San Francisco with 450 employees across 15 global offices. App Annie has received \$157 million in financing, including from investors such as e.ventures, Greenspring Associates, Greycroft Partners, IDG Capital Partners, Institutional Venture Partners and Sequoia Capital.

For more information, please visit [www.appannie.com](http://www.appannie.com), check out our [Insights](#) and follow us on Twitter ([@AppAnnie](#)). To find out more about our products, visit our Market Data Intelligence, Store Stats and App Analytics tour pages. For the most current monthly rankings of apps and publishers, check out the [App Annie Index](#). Report methodology and updates are available [here](#).

