

State of Mobile 2022





EXECUTIVE SUMMARY:

2021 Indonesian Mobile Landscape at a Glance

New App Downloads

7.31B

App Store Spend

\$532M

Daily Time Spent
Per User

5.4 Hrs

Gaming App Downloads

3.13B

Gaming App Spend

\$325M



2Y Growth

iOS, Google Play

> 13,000 apps downloaded per minute in 2021



2Y Growth

iOS, Google Play

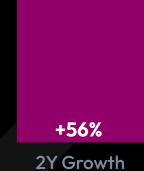
> \$1,000 spent per minute in 2021



2Y Growth

Android Phones

1/3 of daily waking hours



iOS, Google Play

> 42% of all apps downloaded in Indonesia in 2021



2Y Growth

iOS, Google Play

> 61% of all app spend in Indonesia in 2021

Contents

- Macro Mobile Trends
- Gaming
- Finance
- Retail
- Video Streaming
- Food & Drink
- Health & Fitness
- Social
- <u>Travel</u>
- Dating
- Other Industries Embracing Mobile
- Top App & Games of 2021

Dive deeper into the insights contained in this report by exploring directly in data.ai Intelligence. Each slide contains links to view the data in expanded markets and trended over time. For access to data.ai Intelligence, reach out today. This report is interactive. For the best user experience, please view in your web browser.

A Few of Our Amazing Customers



























































Macro Mobile Trends

Consumer time and transactions in apps continues to hypercharge different verticals - From Gaming to Retail to Food/Ride hailing and now Finance, Fintech & Edutech. It is increasingly critical for brands to proactively invest in developing robust app-based insights and app capabilities to make the most of the surge in user attention and time.

Neel Murty Head of Apps & Display, SEA Google



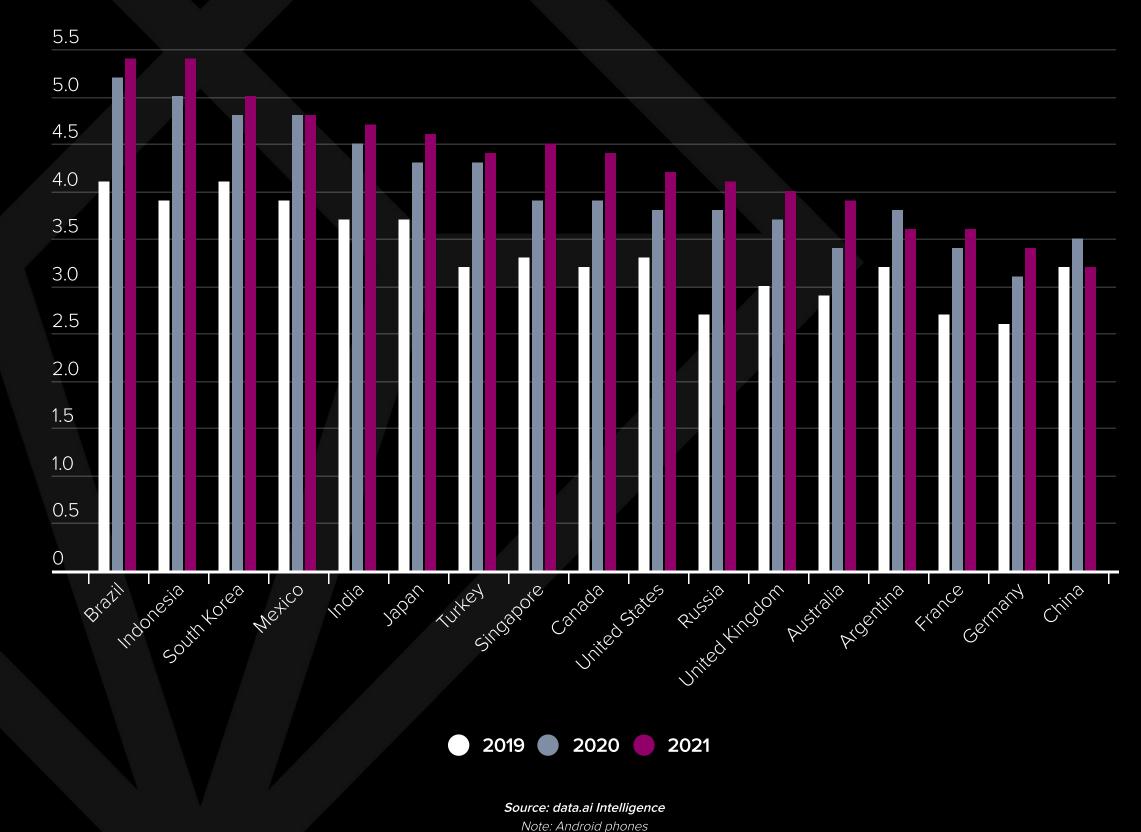
Indonesians Spent 1/3 of Waking Hours on Mobile, Up 38% Since 2019

Across the top 10 markets analyzed, the weighted average surpassed 4 hours 48 minutes in 2021 — up 30% from 2019. Users in Brazil, Indonesia and South Korea surpassed 5 hours per day in mobile apps in 2021.

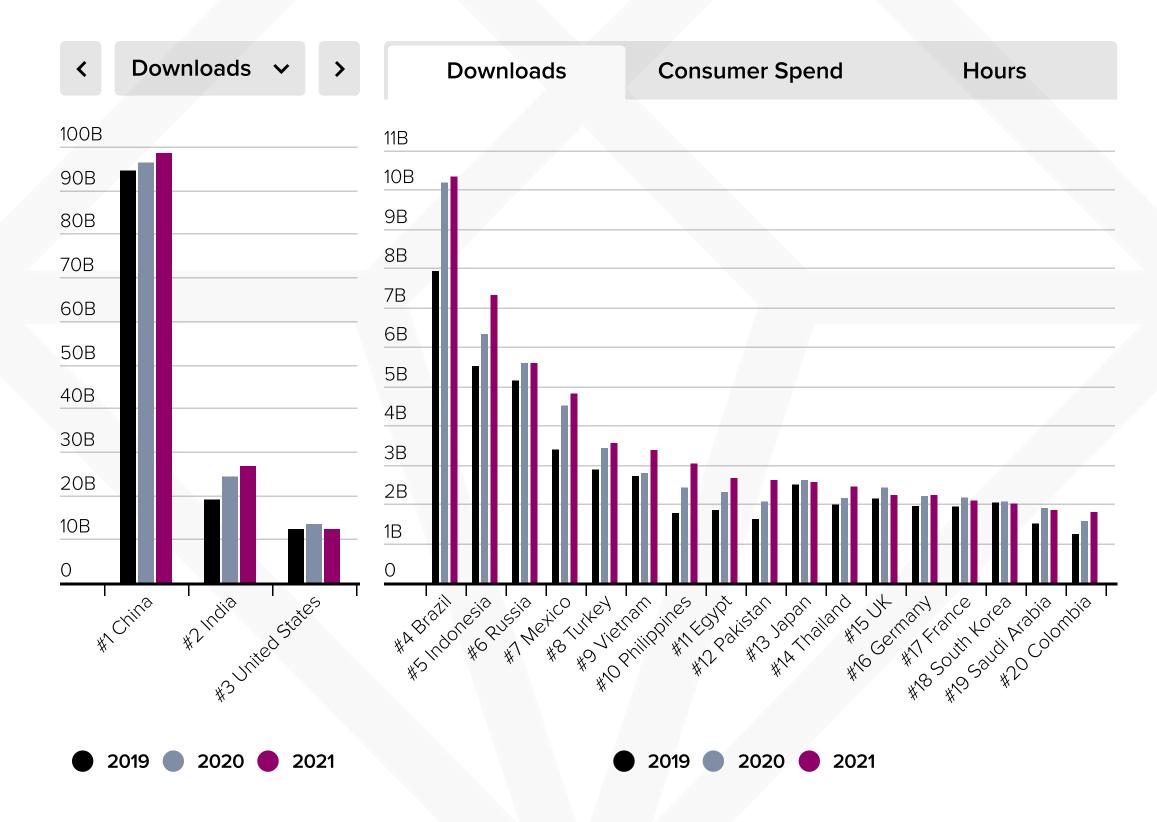
Although the average Indonesian watched <u>4.33 hours of</u> <u>TV a day in 2018 (according to the latest available data)</u>, the time they spend on their mobile devices is quickly set to surpass that.

Mobile usage estimates <u>highlight growth sectors</u> to inform strategic roadmap and investment priorities. Know where to make strategic decisions: advertising spend, corporate prioritization and resource allocation follow the eyeballs — and they are on mobile.

Average Hours Spent on Mobile Per Day Per User



Top 20 Mobile Markets in 2021



Source: data.ai Intelligence

Note: Downloads across iOS, Google Play and third-party Android in China combined; Time spent is Android phones only; Spend is gross — inclusive of any percent taken by the app stores

MACRO MOBILE TRENDS

Globally 230 Billion Downloads, \$170 Billion in Consumer Spend, 3.8 Trillion Hours

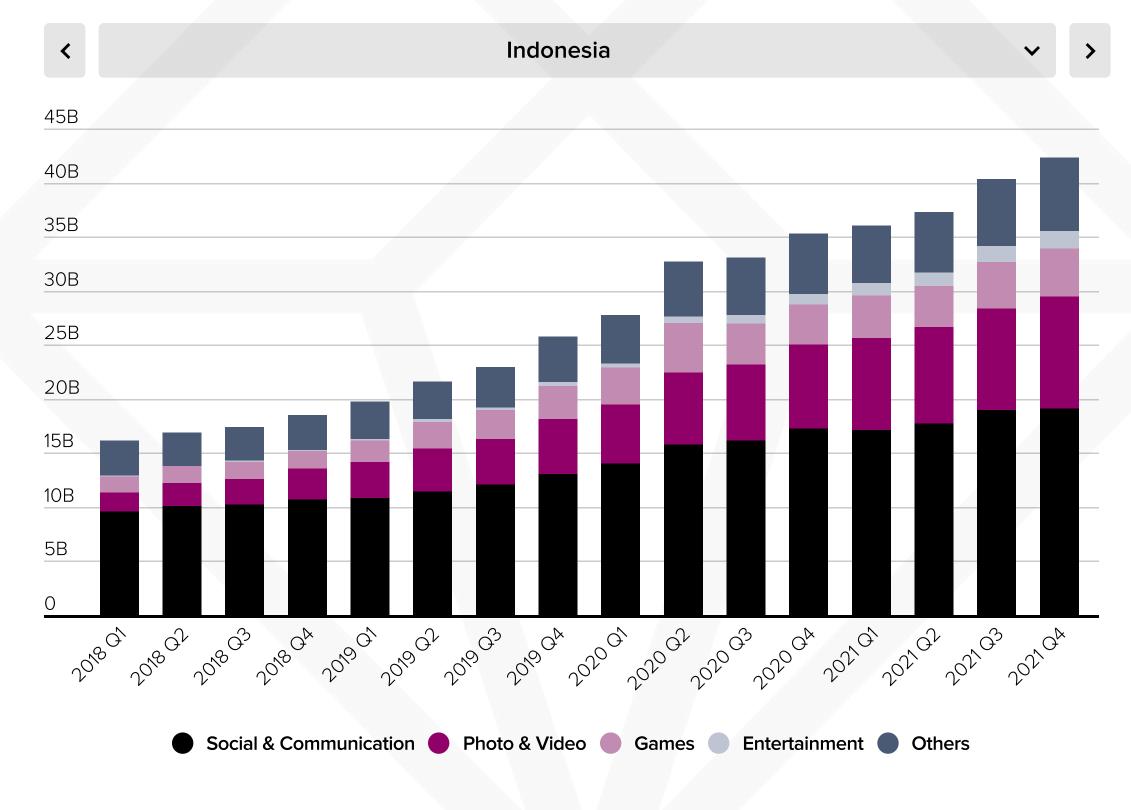
Indonesia saw phenomenal growth in hours spend on mobile, seeing 156 billion hours in 2021, 66 billion more hours than 2020, equating to a 20% growth YoY as mobile — especially mobile gaming — go mainstream.

Emerging markets dominate for downloads growth with India seeing standout downloads. Pakistan, Peru, Philippines, Vietnam, Indonesia and Egypt were among the fastest growing markets for downloads at 25%, 25%, 25%, 20% 15% and 15% growth YoY, respectively.

Mobile adoption boomed in 2021, with growth across downloads, usage and app store consumer spend.

Size the market and keep tabs on fast-growing areas of opportunity in data.ai.

Hours Spent in Apps by Category



Source: data.ai Intelligence Note: Android phones

MACRO MOBILE TRENDS

In Indonesia, 7 Out of Every 10 Minutes on Mobile Was Spent in Social and Photo & Video Apps in 2021

As time increases on mobile in emerging categories, consumers are also engaging deeper in early-mover categories like Social, Communication, and Photo & Video apps.

While Photo & Video apps (e.g. <u>YouTube</u> and <u>TikTok</u>) have seen an increase in market share of time spent, this has largely not been at the expense of current habits. Rather, consumers have turned historically 'non-mobile' time into time spent in apps and games.

The pandemic accelerated existing mobile habits, which have solidified in 2021. While social dominates for time spent globally, regional differences in app preferences highlight unique market differences. <u>Discover local trends in data.ai</u>.

MACRO MOBILE TRENDS

Mobile Ecosystem Healthier Than Ever: Publishers Released 2 Million New Apps & Games in 2021

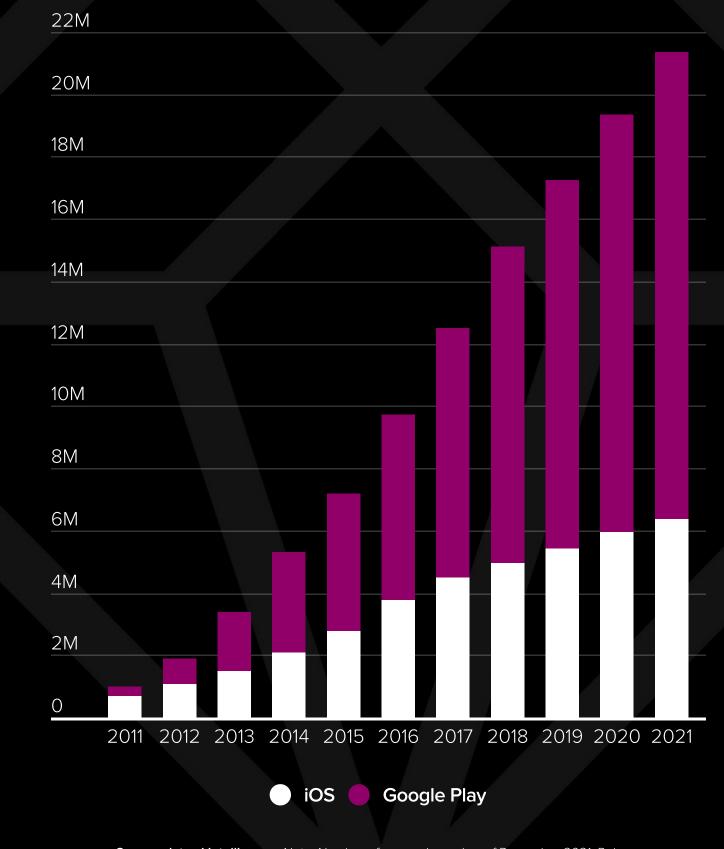
This brings the total of apps and games ever released on iOS and Google Play to over 21 million.

Google Play accounted for 77% of all apps and games releases in 2021. Across both iOS and Google Play, Games represented 15% of all new releases in 2021. The remaining 85% of new apps span all categories of the app stores, from mobile-first movers like social to mobile-forced industries like insurance and healthcare.

Apps are also removed and phased out overtime to leave the current live apps and games available to download on the app stores at 5.4 million (1.8 million on iOS and 3.6 million on Google Play).

With smartphones providing unparalleled reach and access to billions of consumers worldwide, every industry is a mobile-focused industry — New app releases illustrates the demand for engaging customers on mobile. Keep tabs on the rapidly-changing competitive landscape with data.ai.

Cumulative Number of Apps Released by Store



Source: data.ai Intelligence. Note: Number of apps released as of December 2021. Release date is based on app metadata on iOS App Store or Google Play in any country

MACRO MOBILE TRENDS

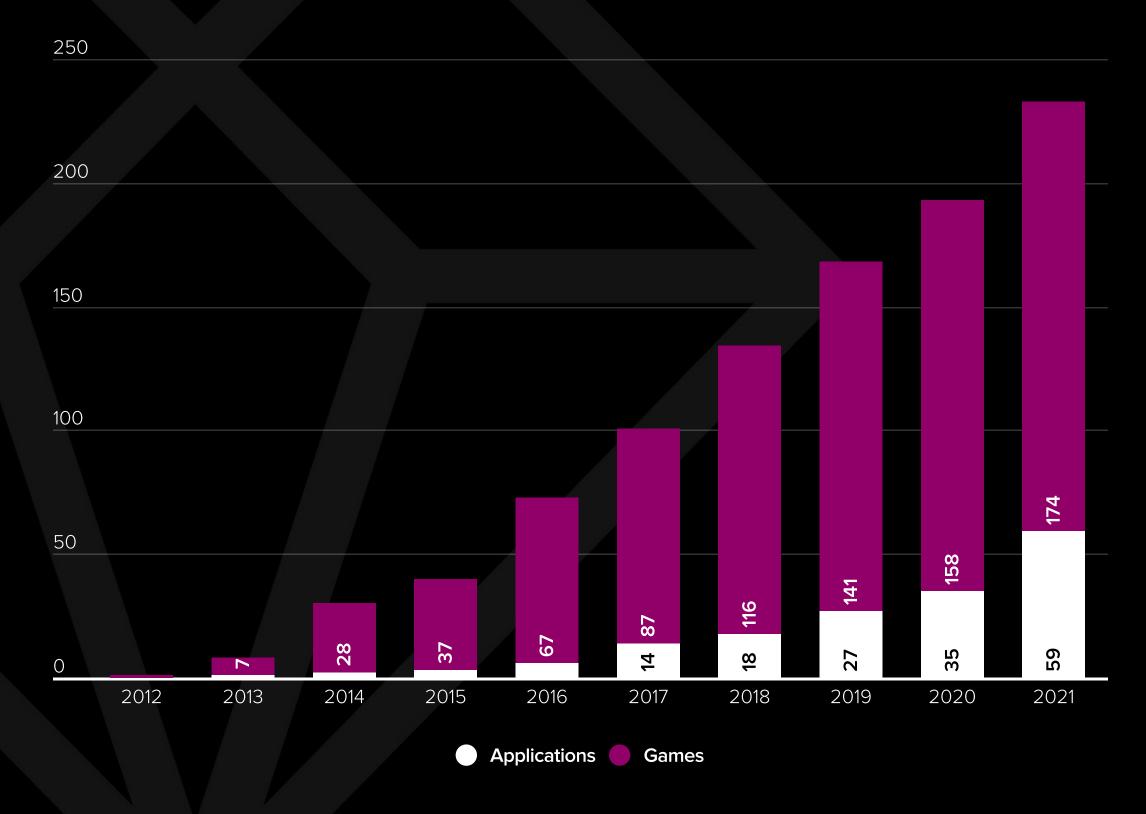
233 Apps & Games Generated Over \$100 Million Dollars Annually in 2021

Consumers migrated more of their entertainment and games consumption onto mobile. In 2021, there were over 230 apps and games surpassing \$100M in annual consumer spend, with 13 of them surpassing \$1 Billion.

This was up 20% from 2020 at 193 apps and games over \$100M in annual spend, and only 8 over \$1 Billion.

Improved connectivity, screen size and hardware have made it easier than ever before to enjoy premium applications & gaming experiences on-the-go. Consumers, consequently, migrated share of wallet to mobile as the de facto gaming console and tool for managing our lives. <u>View top grossing apps in data.ai</u>.

Number of Apps Surpassing \$100 Million in Annual Global Consumer Spend



Source: data.ai Intelligence

Note: Consumer Spend across iOS, Google Play, iOS only for China; Spend is gross — inclusive of any percent taken by the app stores

Global Mobile Ad Spend



Source: data.ai Intelligence

MACRO MOBILE TRENDS: ADVERTISING

Despite IDFA Fears, Dollars Flocked to Mobile Ads—Topping \$295B in 2021, up 23% YoY and Poised to Hit \$350B in 2022

Mobile is driving digital ad spend globally. Amidst an economic rebound with GDP up 5.9% in 2021, cyclical events like the Tokyo Olympics and UEFA Euro Tournament, and engrained mobile habits, ad dollars flowed to mobile as the primary and captive channel for engaging consumers — representing 70% of digital spend.

With the Beijing Olympics in 2022 and US mid-term elections, digital ad spend is set to be robust with the majority driven by mobile. Brand marketing vs performance marketing is set to pick up as businesses and brands capitalize on mobile's broad and captive audience amidst the backdrop of IDFA deprecation.

Monitor the changing best practices in mobile advertising, pinpoint ad creatives are performing best and decode the growth strategies of the leaders in the mobile user acquisition. <u>Uncover advertising insights in data.ai</u>.

The Most Searched Android App Store Keywords in 2021

Business < South United **Turkey** Rank Australia **Brazil** Canada China France India Indonesia Japan Mexico Russia **United States** Germany Kingdom Korea scanner job seek meet zoom teams zoom zoom zoom zoom zoom edevlet zoom zoom app microsoft australia google почта 줌 google meet teams yahoo zoom zoom zoom meet zoom zoom meet россии teams post whatsapp 알바몬 3 linkedin türkiye google meet | jobs hh.ru indeed scanner app meet teams meetings teams zoom business 알바천 국 腾讯会议 scanner for microsoft google pôle emploi meetings **i**şkur やふー job indeed autoscout24 teams meetings ЗУМ iphone meet teams microsoft леруа scanner 한글 やふー işkur 5 claro linkedin microsoft teams teams linkedin camscanner logo teams мерлен app free authenticator microsoft vagas de やふー 알바 6 jobs teams linkedin pdf мой налог meet linkedin duo mobile **WDS** scan team emprego authenticator まいなぽいんとアプリ microsoft zoom 사람인 pln pdf linkedin chat indeed pdf лукойл linkedin indeed linkedin teams meeting whatsapp microsoft the zoom app cam メモ linkedin adobe scan ine chat team xero teams teams teams business for iphone scanner 今日 头条 microsoft canada whatsapp microsoft ずーむ 9 pdf jobstreet pdf pdf team ростелеком google meet teams chat post buisness teams teams zoom アプリ 無 料 모바일 팩스 uber uber driver google pdf scanner time minha claro ornikar adobe scan linkedin indeed аэрофлот meetings driver meet app

<u>Uncover trends in App Store Optimization (ASO)</u> in and competitive insights on app store search traffic, keyword rankings and paid app store search ads in data.ai.

Gaming

Jam City's business has experienced terrific growth over the years and we head into 2022 with billions in aggregate lifetime revenue and tens of millions of players around the world. data.ai has remained a valued partner whose market intelligence platform provides industry benchmarking and competitive insights across the mobile ecosystem which our team uses daily to help drive our continued success at scale.

Josh Yguado President and COO Jam City



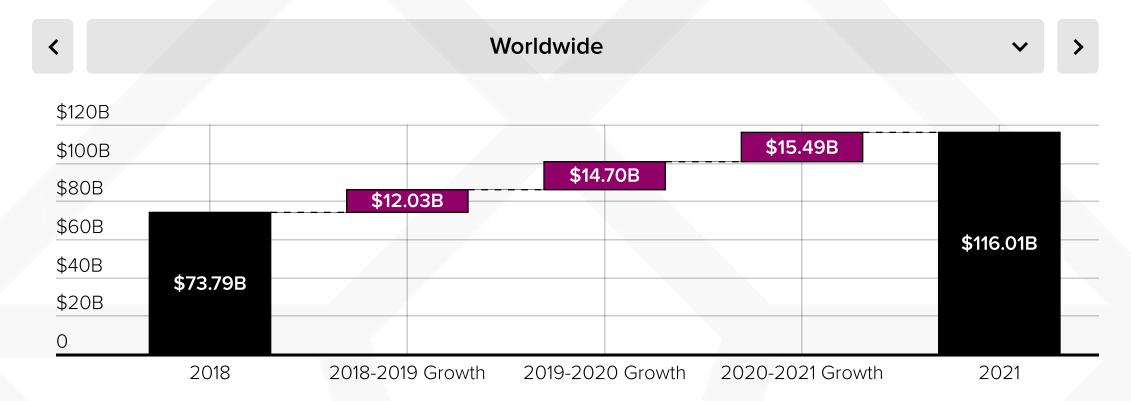
In Indonesia, Additional 490 Million in Gaming Downloads was Added in 2021, Bringing Total to 3.1 Billion

Hypercasual games such as <u>Hair Challenge</u> and <u>Bridge</u>
<u>Race</u> were key downloads driver, but 2021 saw some well known IPs such as <u>Pokémon UNITE</u>, and <u>PUBG: NEW STATE</u> making major gains in downloads and usage.

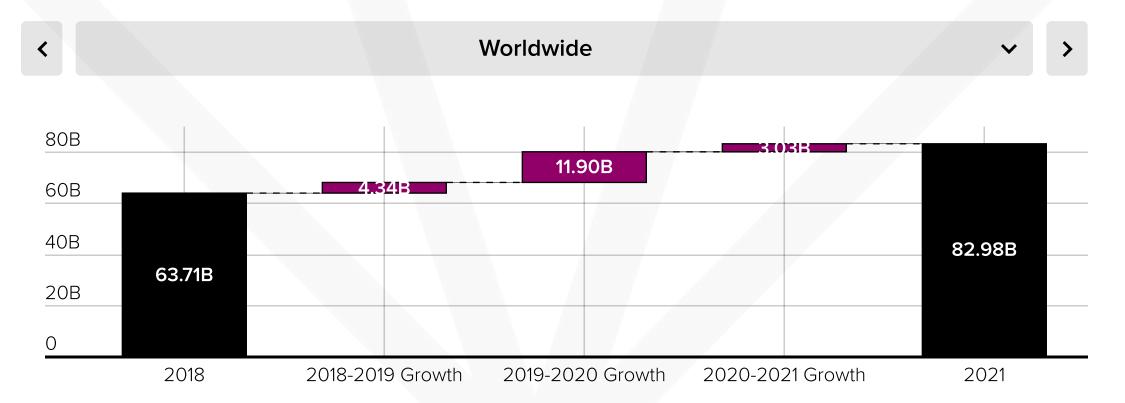
Hit games such as *Roblox* and *Genshin Impact* also saw growth in consumer spend worldwide as mobile games are now capable of offering console-like graphics and gameplay experiences. The gaming scene in China has seen renewed excitement over the release of *Harry Potter Magic Awakened* and *League of Legends: Wild Rift* in H2 2021, and we expect these to further occupy the top revenue charts in the coming months and further add to global mobile gaming growth.

Mobile game sustained strong momentum from pandemic surge — 2021 in gaming was as dynamic as any previous year. The time to act is now.

Mobile Game Consumer Spend Growth

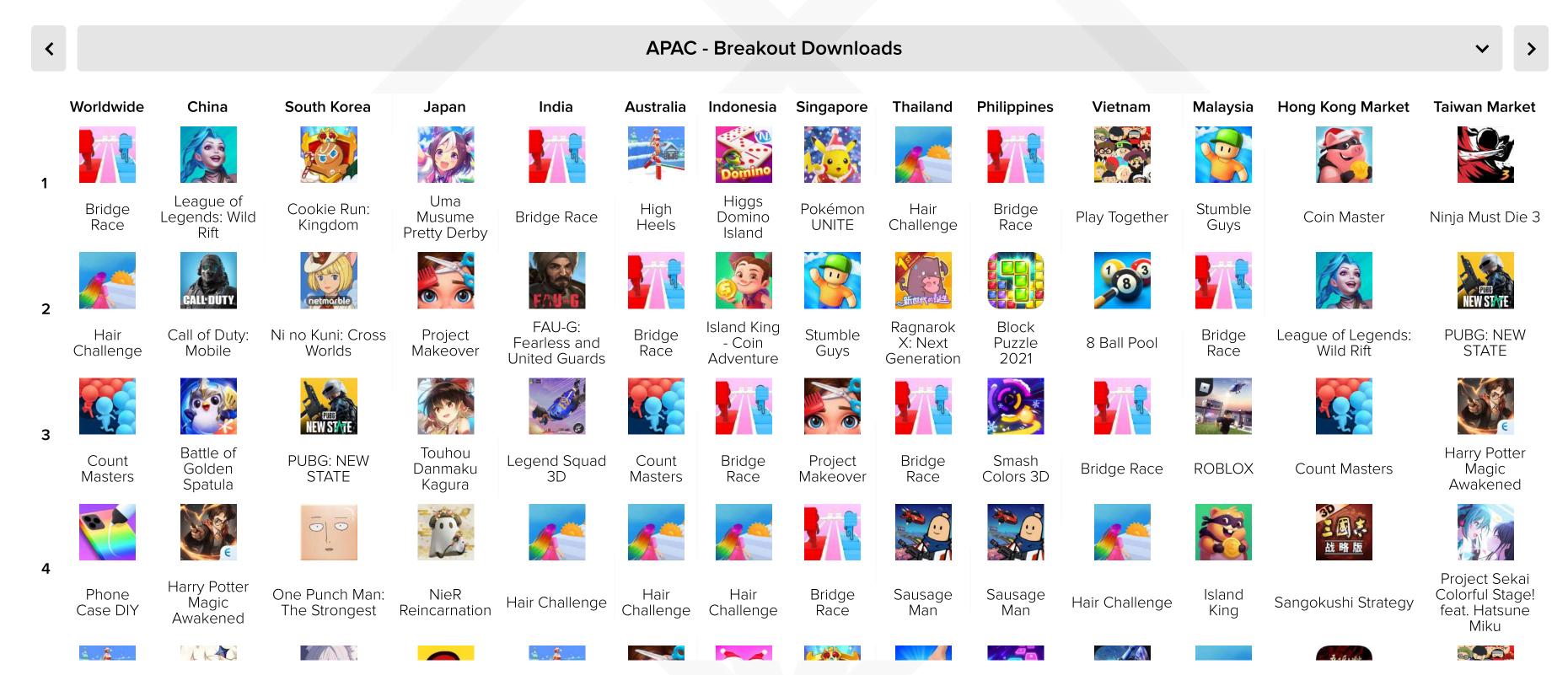


Mobile Game Downloads Growth



Source: data.ai Intelligence Note: Downloads across iOS, Google Play and third-party Android in China combined; Time spent is Android phones only; Spend is gross — inclusive of any percent taken by the app stores

2021 Breakout Rankings by Market | Games

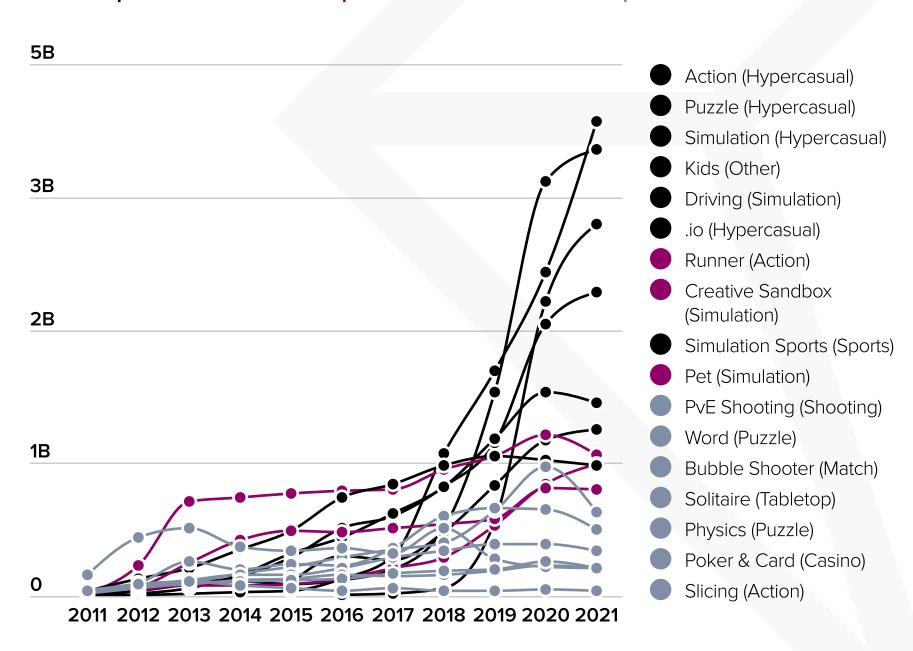


Learn More: Uncover the <u>Top Games by Change in Yearly Downloads</u>

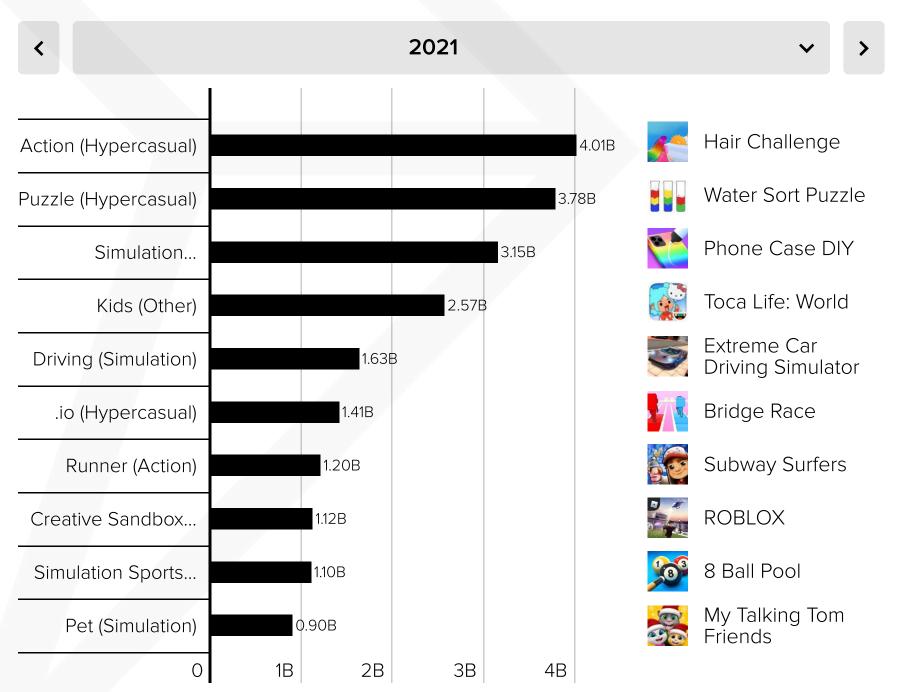
Astronomical Rise of Hypercasual: Innovation & Shifting Player Preferences Gave Way to Emerging Game Genres

Yearly Evolution of Top Genres by Downloads 2021 Top Genres 2021's Top Genres in 2011

2011 Top Genres



Worldwide | Top Gaming Subgenres & Top Games by Downloads

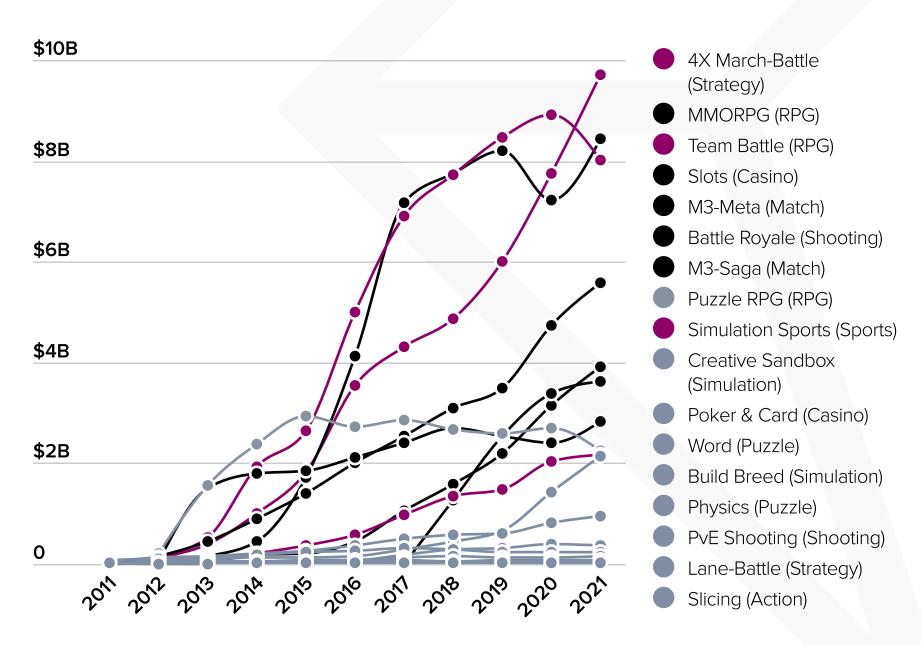


<u>Analyze More Genres in App Annie's Game IQ Market Sizing Report</u>

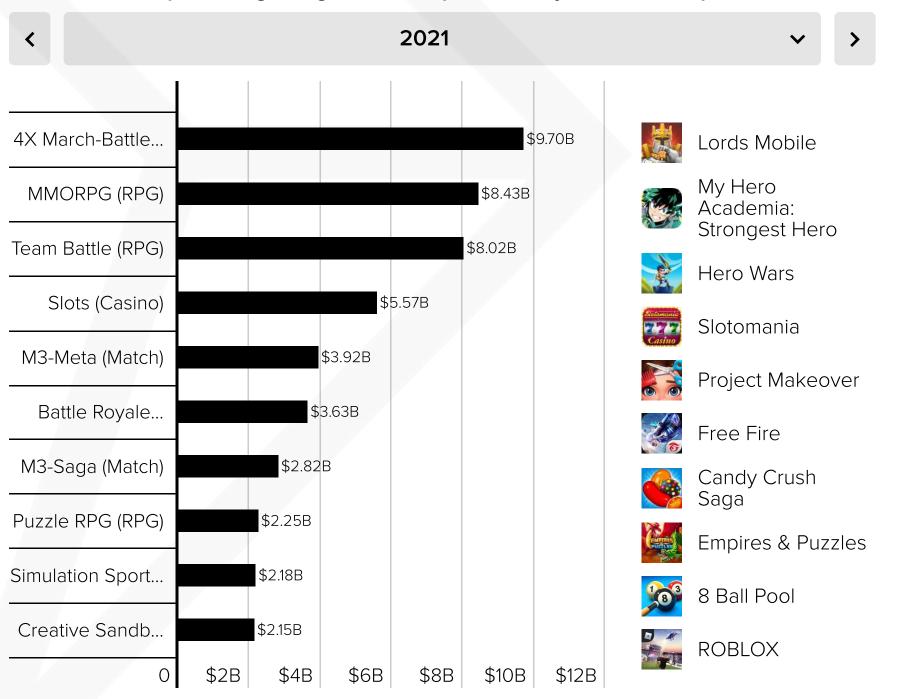
4x March-Battle Strategy Games Emerged as the Most Monetizable Genre for Mobile Games

Yearly Evolution of Top Genres by Consumer Spend

2021 Top Genres 2021's Top Genres in 2011 2011 Top Genres



Worldwide | Top Gaming Subgenres & Top Games by Consumer Spend



<u>Analyze More Genres in App Annie's Game IQ Market Sizing Report</u>

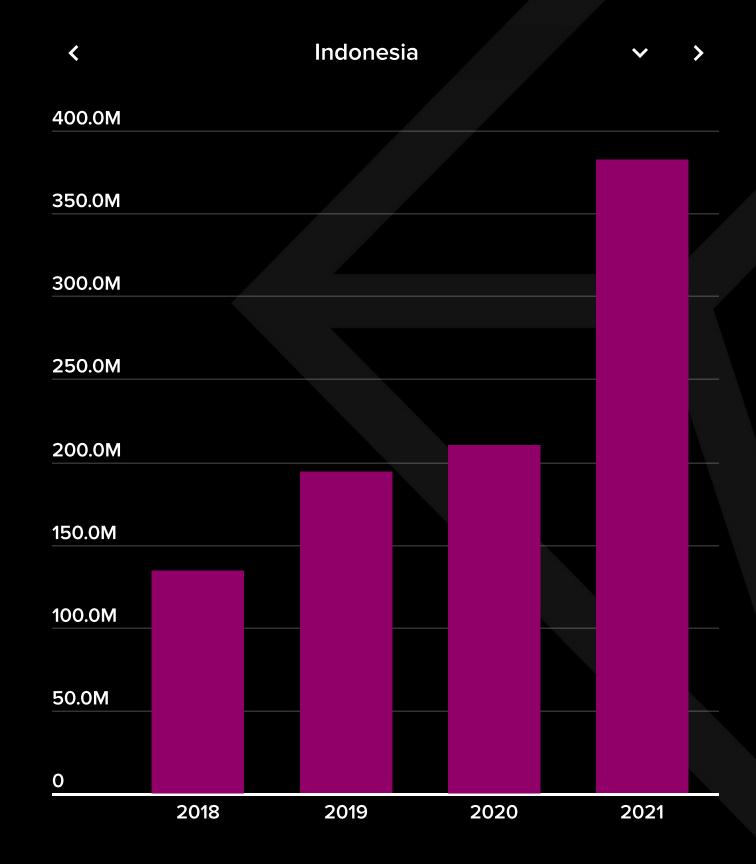
Finance

As DANA focuses on improving the quality of life of Indonesian people through our one-stop financial lifestyle platform, we need to understand the profound spectrum of the fast-changing mobile and digital ecosystem. data ai has given us extensive insights to increase the growth of our app performance.

Vincent Henry Iswaratioso
Chief Executive Officer
DANA Indonesia



Finance App Downloads by Country



Source: data.ai Intelligence

Note: Downloads across iOS, Google Play; China is iOS only

FINANCE

Finance App Downloads in Indonesia Surpassed 382M in 2021, an 82% YoY Increase and a 185% Increase Since 2018

Aside from Indonesia, Mexico, Argentina, and Brazil saw the largest growth over the past 4 years, up 250%, 180% and 175%, respectively, although they are not the largest markets globally.

In Latin America, there is a substantial underbanked community as <u>70%</u> of their population does not have a bank account and nearly 80% does not have a credit card. Consumers are more willing to try alternatives to retail banks, such as neobanks, which tend to be more accessible to those without excellent credit and offer custom features better suited for specific needs.

Knowing high-growth areas is key for app publishers when determining their expansion strategies. <u>Compare Finance app downloads over the years and track their market growth.</u>

FINANCE

Neobanks Gain in Popularity Globally in 2021; Indonesia's Jenius Saw a 12% Increase in Monthly Active Users YoY, 3.5X That of Digibank's

Most countries tend to use homegrown neobanks. <u>Neo: BNC bank</u>, for example, saw its average monthly active users surge to match <u>Jenius's</u> level despite only launching in March last year. Mexico is an exception, where <u>Brazil's Nubank</u> topped the charts across both countries.

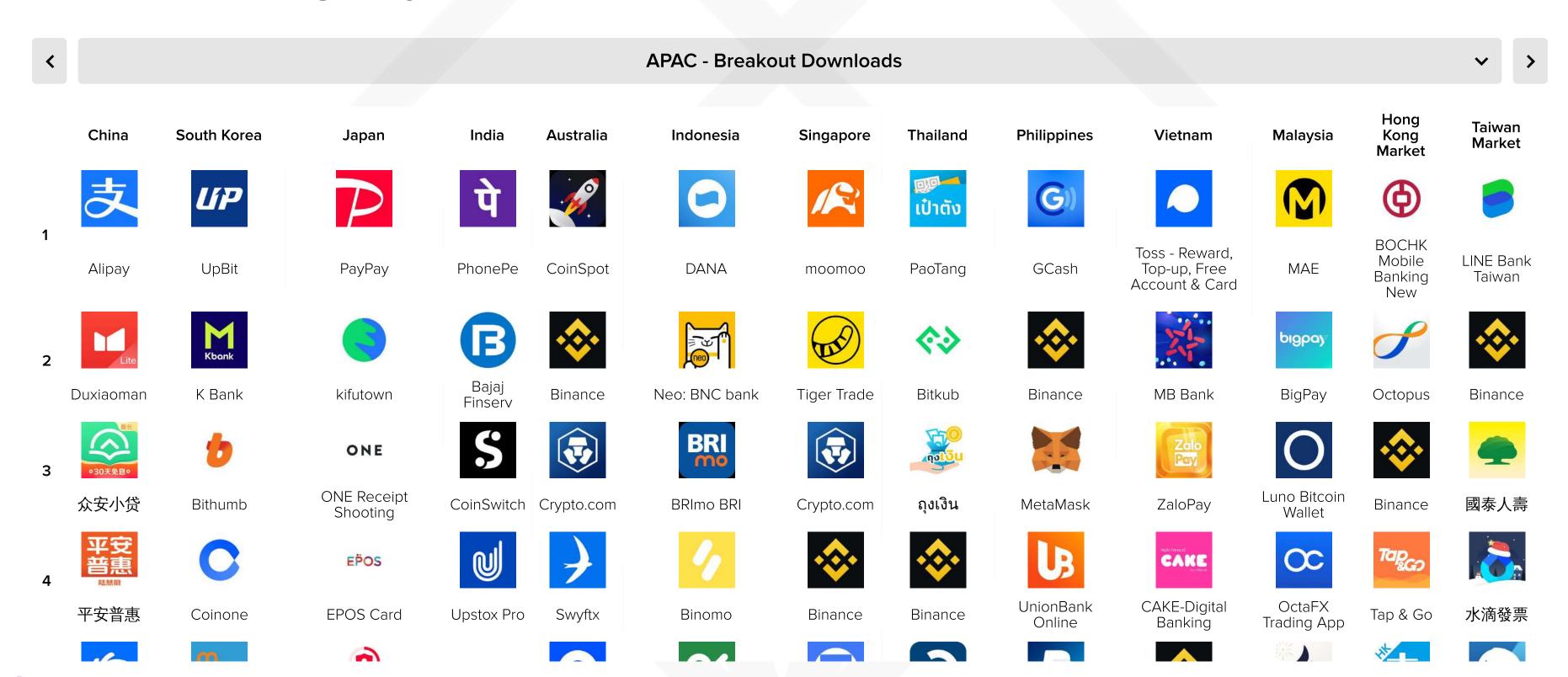
In fact, Brazil is a hotspot for neobank adoption as it has a large population that currently does not have relationships with retail banks; *Nubank* and *PicPay* had the second and 3rd highest average MAU worldwide in 2021, while its *C6 Bank* and *Banco PAN* saw >200% growth in MAU YoY.

In contrast, Australia's user base, for example, rely less on neobanks due to the popularity of the advanced money movement capabilities within the region's existing retail banks.

Knowing the current offerings of existing finance apps and whether they serve the needs of the region's users is crucial for any finance app publisher. <u>Explore Brazil's Top Finance apps of 2021</u>.

Top 5 Neobanks by Average MAU in 2021 Indonesia 2.4M 2.2M 2M 1.8M 1.6M 1.4M 1.2M **1M M8.0** 0.6M 0.4M 2,084,000 2,284,000 526,000 0.2M 2020 Source: data.ai Intelligence Note: iPhones and Android devices Mydoh launched in May 2020 on iOS and in June 2021 on the Google Play Store. Neo: BNC Bank launched in March 2021 across iOS and the Google Play Store.

2021 Rankings by Market | Finance



Learn More: Uncover the <u>Top Finance Apps by Change in Yearly Downloads</u>

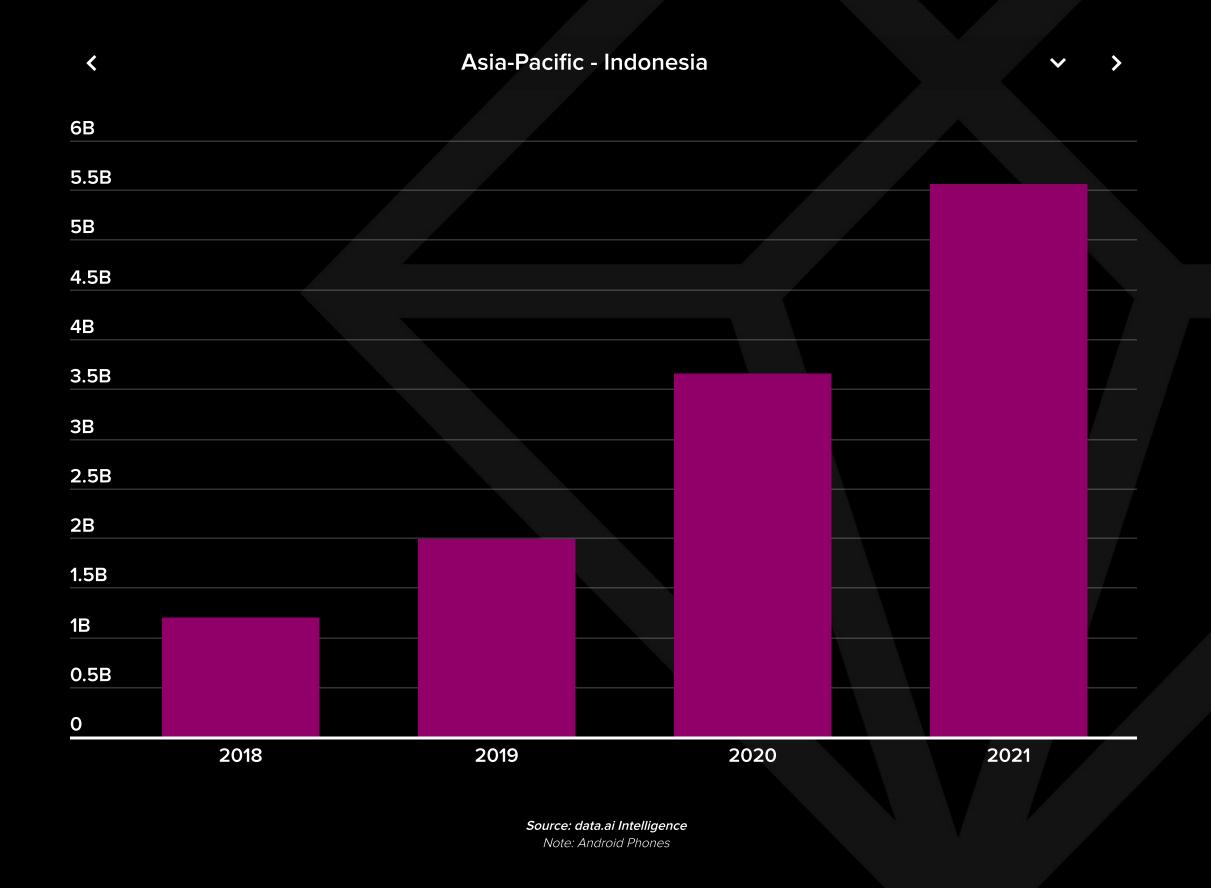
Retail

At ASOS, our vision is to be the go-to global destination for fashion loving 20-somethings - the place that our target consumers turn to for fashion. Our apps are critical in helping us realise that vision - enabling us to create a place that's inspiring, engaging and entertaining - with the technical agility, global scale, and resilience to continuously innovate and personalise our offering to become the fashion best friend of each of our customers.

Vijay Ram Head of Technology - Mobile Apps ASOS



Annual Hours Spent in Shopping Apps



RETAIL

Time Spent in Shopping Apps Reached Over 100B Hours Globally and 5.5B Hours in Indonesia

Time spent in Shopping apps rose 18% globally year-overyear, with strong movement in fast fashion, social shopping, and mobile-savvy big-box players.

Among the countries with the fastest growth were Indonesia, Singapore and Brazil at 52%, 46% and 45% growth YoY, respectively.

Mobile shopping habits catalyzed during COVID-19 have solidified. Monitor peak shopping periods in data.ai.

Overseas Brands Grow International Footprint, Growing Market Share by 11% in Some Regions

APAC-HQ'd shopping apps have grown international downloads, shifting market share to non-native-based brands in many regions. Across AMER, overseas publishers grew in share of downloads. In Indonesia, the mobile shopping market continued to be dominated by non-domestic brands (72% share), with only 28% from Indonesia-based brands.

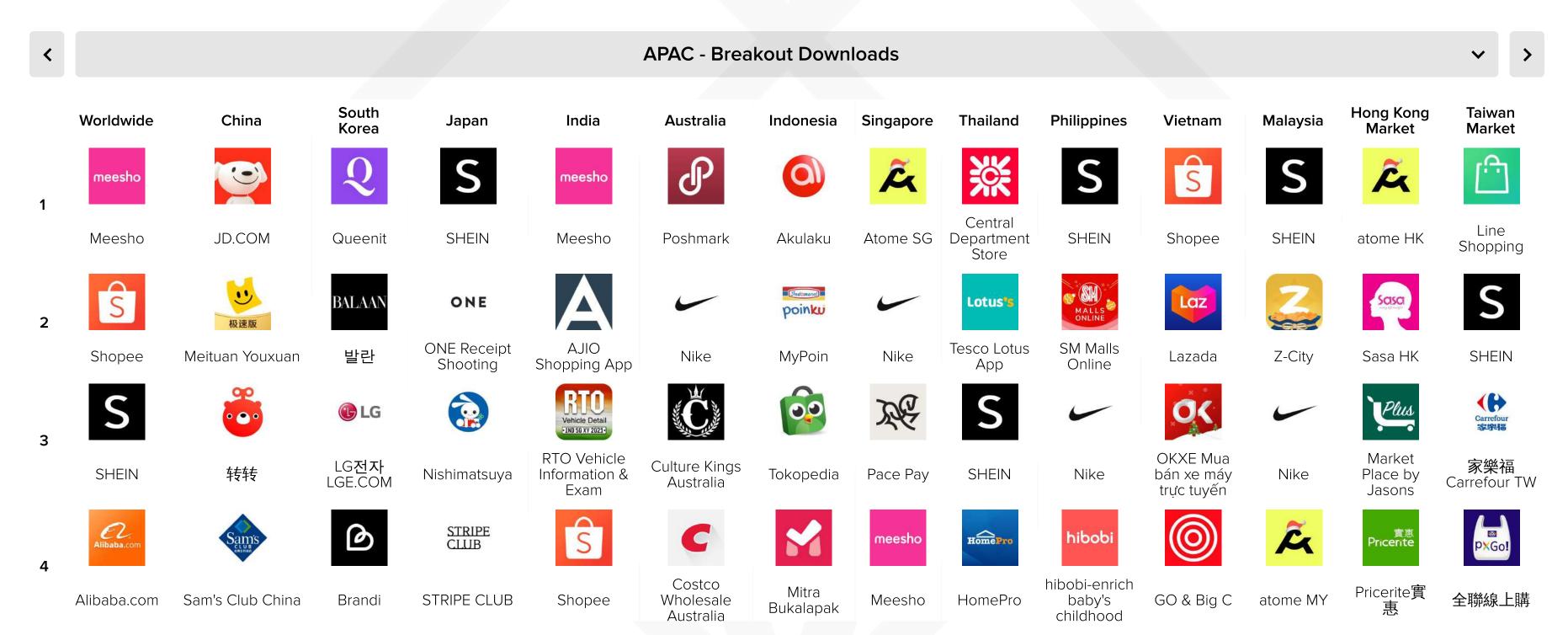
As a comparison, US-based apps lost 5% share of downloads to overseas publishers, driven by China, Canada, Australia, and Japan. In Brazil, Overseas-HQ'd apps dominated 52% of all shopping app downloads in 2021, an increase in share of 11% YoY.

Retail brands are losing share to non-local companies, most notably in regions across AMER as shoppers turn to overseas-HQ'd Shopping apps. Evaluate which of the top companies are driving shifts in market share.

Going Global: Share of Shopping Downloads by Overseas-HQ'd Publishers



2021 Rankings by Market | Shopping

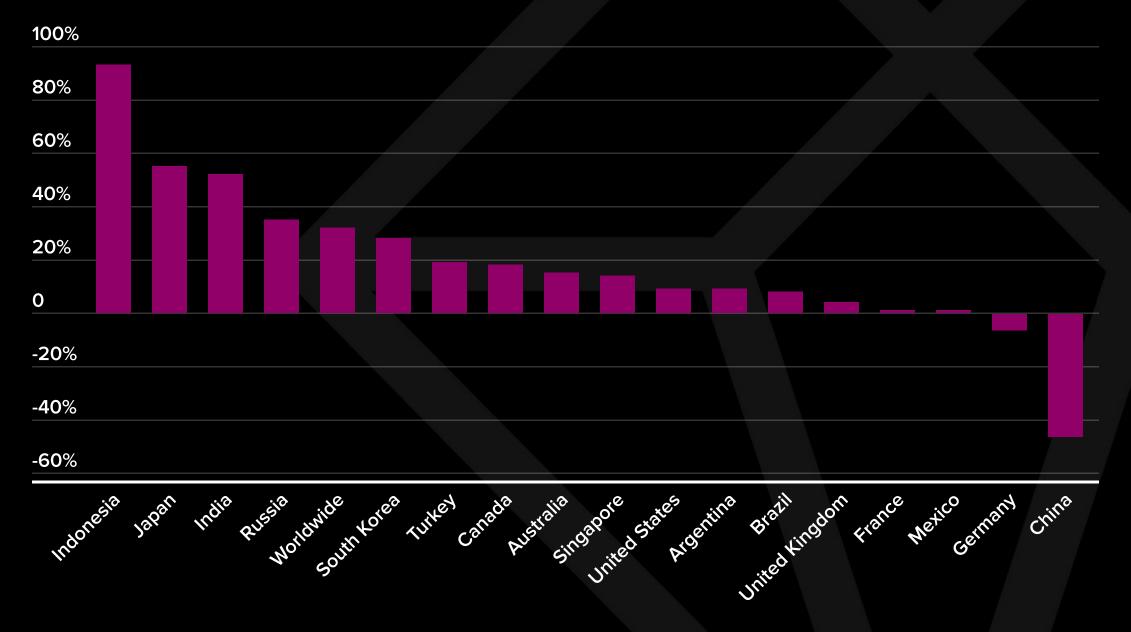


Learn More: Uncover the <u>Top Shopping Apps by Change in Yearly Downloads</u>

Source: data.ai Intelligence.Note: Combined iOS and Google Play; China is iOS only; MAU is across iPhones and Android phones; Market-level rankings; Breakout defined as Year-over-Year growth in Downloads or average MAU.

Video Streaming

Growth in Total Hours Spent Streaming 2021 vs 2019



Growth in Total Hours Spent on Short-Form Streaming

Apps in China, 2021 vs 2019





Kwai: +225%

TikTok: +205%

Source: data.ai Intelligence

Note: Time spent on Android phones among top 20 video streaming apps by time spent; worldwide excludes China

VIDEO STREAMING

Total Hours Spent Watching Video Streaming Apps Grew 93% in Indonesia Since Pre-Pandemic Levels

Most countries in Asia saw growth in time spent among the top 20 video streaming apps, continuing the momentum first seen during the initial stage of the global pandemic. Conversely, in China, video streaming apps saw substantial declines as consumers increasingly gravitated towards short-form video apps; *TikTok* and *Kwai* saw total time spent in app grow by 205% and 225% since 2019, respectively.

Indonesia, Japan, and India saw the highest increases in total hours spent across their video streaming apps in 2021, with <u>YouTube</u> being the primary driver of growth.

Despite access to bigger screens, consumers are still watching content on mobile. Competition is heating up in the space and exclusive content is a way of drawing in new viewers. Keep track of the rapidly changing industry in data.ai.

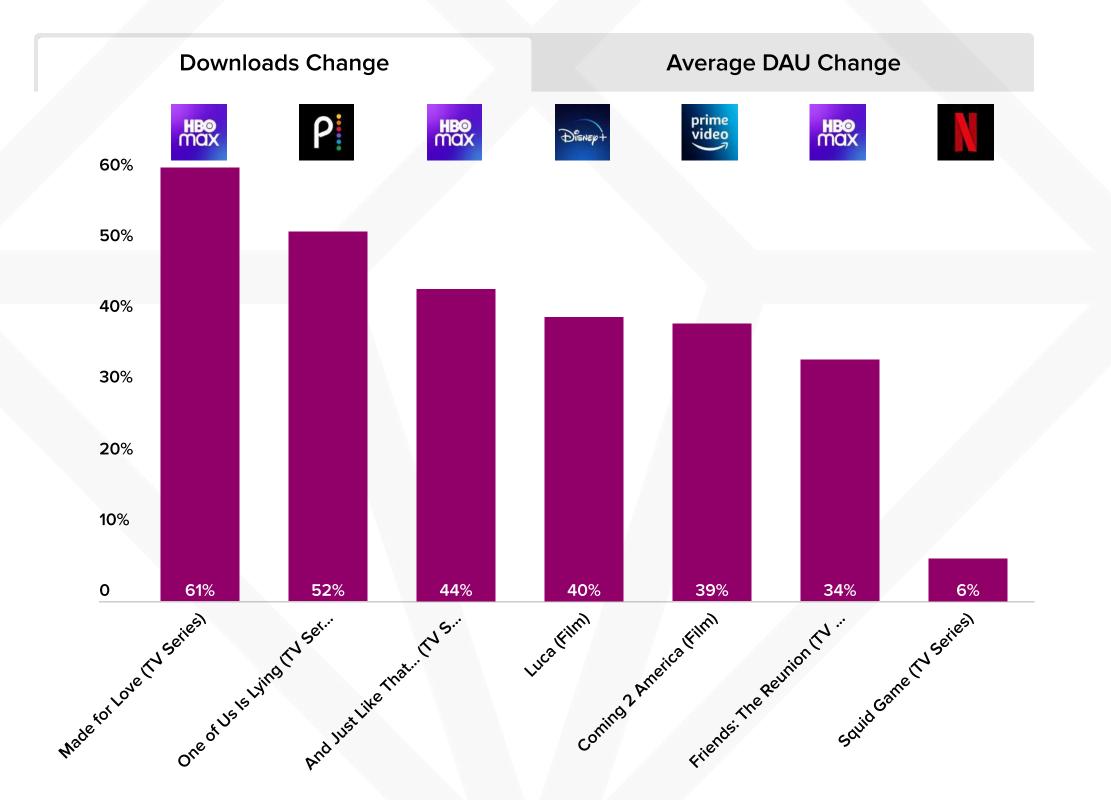
Exclusive Content Releases Drive Spikes in Video Streaming App Downloads Amidst Increased Competition in 2021

As more people were forced indoors due to COVID-19 and continuing to remain at home throughout 2021, demand for video streaming apps surged. To remain competitive, providers leveraged exclusive content releases to capture market share.

The launch of Made for Love (TV Series) coincided with a 61% increase in downloads of the <u>HBO Max</u> app, while Squid Game's release in September 2021 saw a 6% boost for *Netflix* app downloads.

The demand among viewers for exclusive content is stronger than ever. Knowing what original content resonates with the target audience is crucial to staying ahead in an increasingly crowded space. Compare US-based video streaming app downloads.

Downloads and Active Users Growth for Select Exclusive Content Releases, United States 30 Days Prior to Release vs 30 Days After



Source: data.ai Intelligence

Note: Downloads across iOS, Google Play. MAU is across iPhones and Android phones Average DAU represents the average Daily Active Users of an app

VIDEO STREAMING

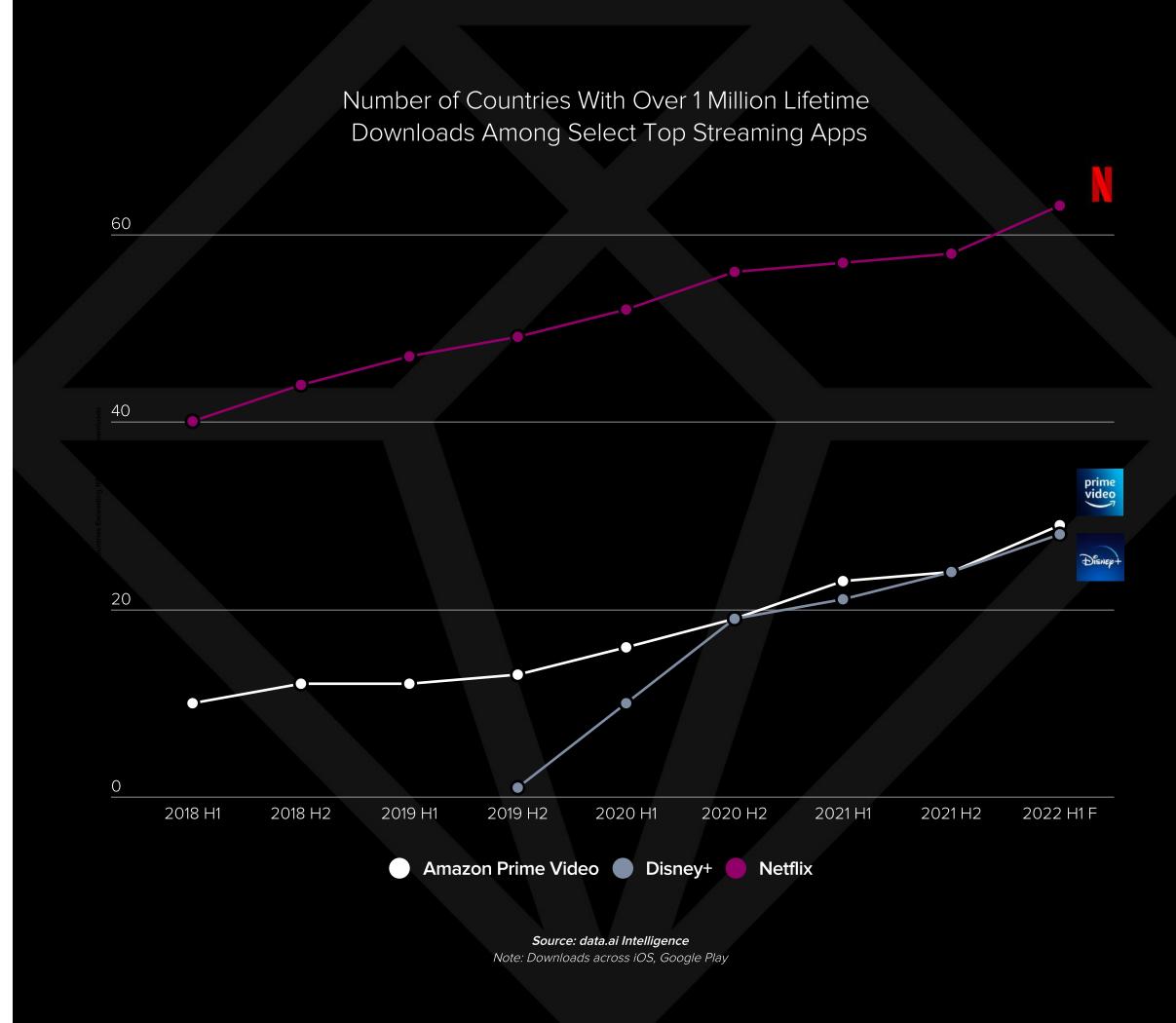
Global Expansion Heats Up: Netflix Set to Surpass 1 Million Downloads in Over 60 Countries in 2022

<u>Netflix</u> has the largest global footprint among video streaming platforms and a robust audience in each: with over 1 million local downloads in 60+ countries.

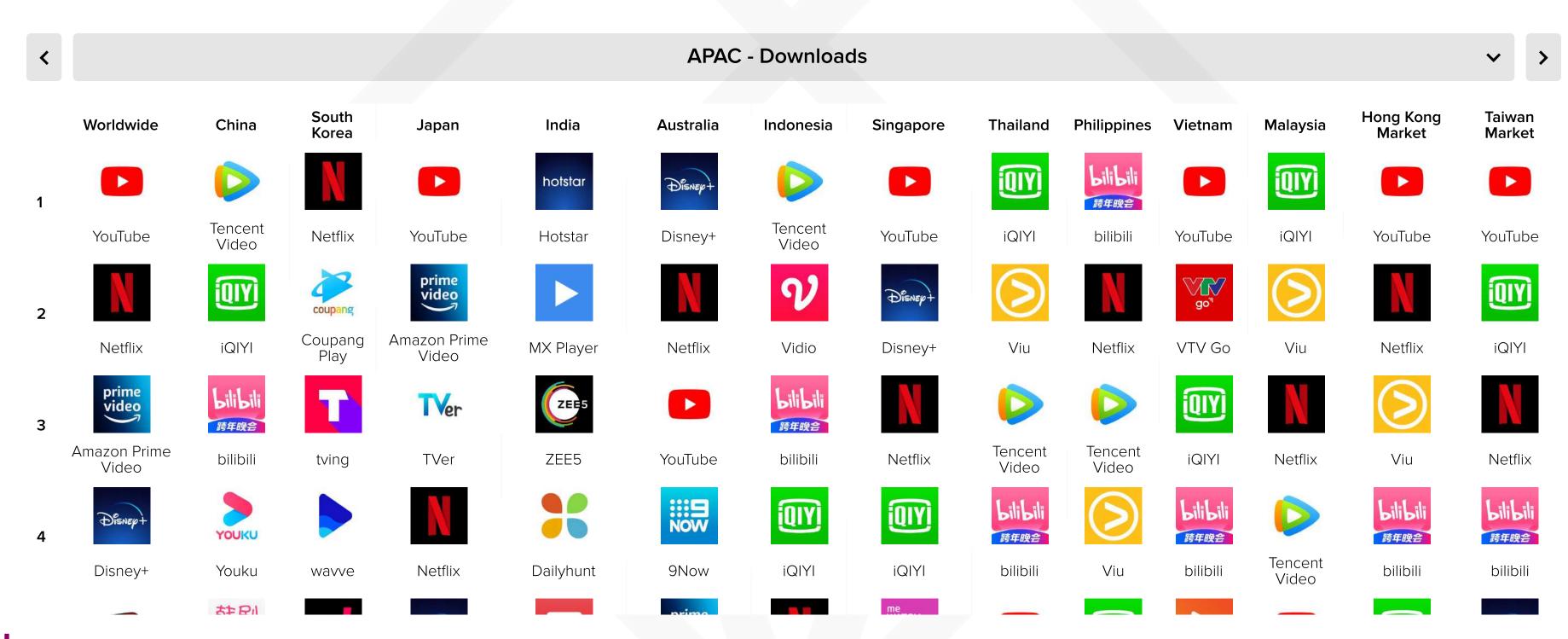
<u>Disney+</u> rivals <u>Amazon Prime Video's</u> global footprint, despite launching 7 years later on mobile.

Exclusive content, strategically timed releases, and overseas expansion are fuelling growth in the video streaming sector — a mobile-first strategy is needed to succeed.

<u>Track lifetime downloads and monitor the global</u> <u>strategies</u> among top players in your competitive set.



2021 Rankings by Market | Video Streaming



Learn More: Uncover the <u>Top Video Streaming Apps by Downloads</u>

Source: data.ai Intelligence Note: Combined iOS and Google Play; China is iOS only; Market-level rankings.

Video Streaming Apps custom categorized from the Entertainment, Photo & Video, News, Sports, News & Magazines and Video Editors & Players categories across iOS and Google Play

Food & Drink

From grocery, alcohol, and convenience to morning coffee runs, we're focused on making Uber Eats reliable, flexible and easy to use. Trusted data points from sources like data.ai help us to measure that success and refine our mobile strategy over time.

Pierre Dimitri Gore-Coty SVP of Delivery Uber



FOOD & DRINK

New Record: Sessions in Food & Drink Apps Reached 62 Billion

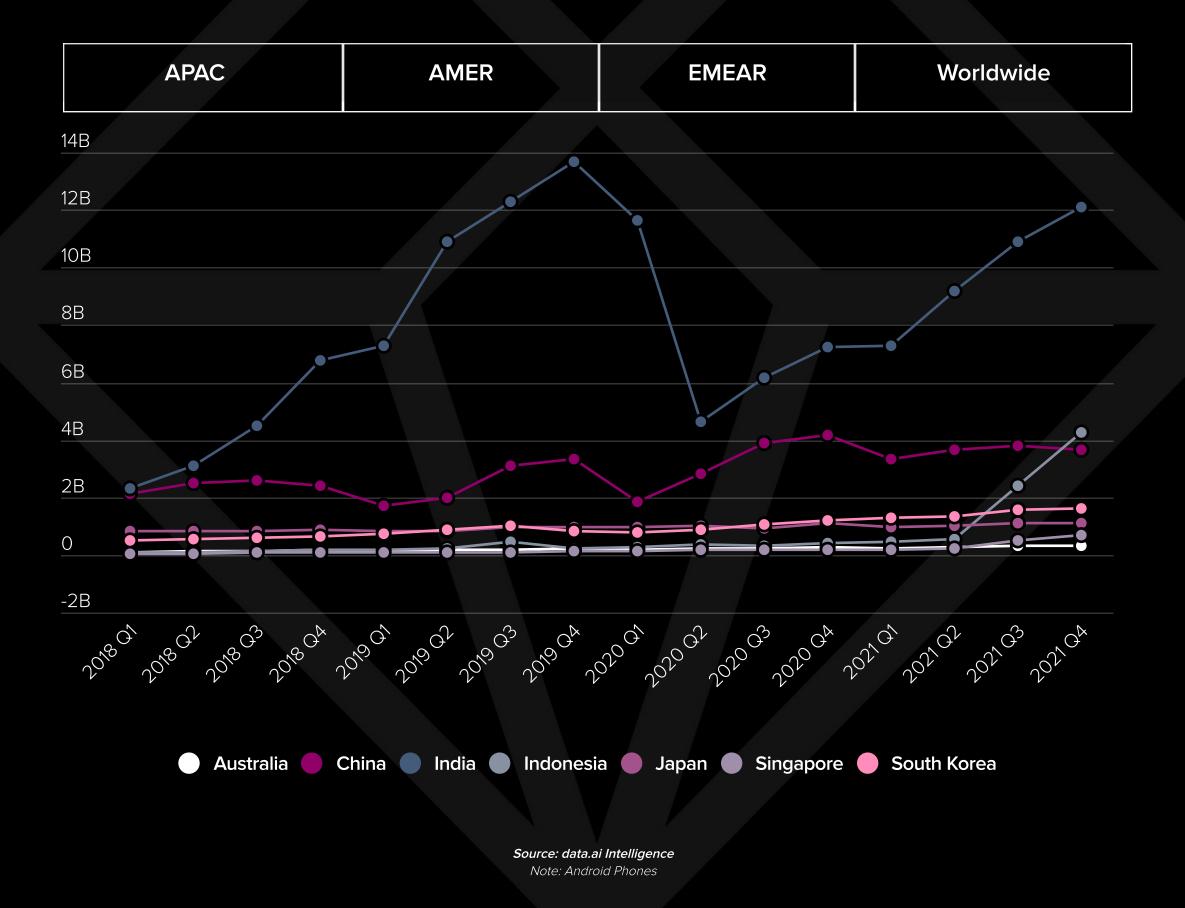
The pandemic expedited usage of Food & Drink apps across the world. Despite concerns for a slowdown following regional re-openings, an increase in both supply and in demand pushed market growth further than ever. In Indonesia, users in 2021 spent nearly 480% more sessions YoY in Food & Drink apps.

After facing a decline in user sessions in India in Q2 2020 due to logistics issues arising from the pandemic, India bounced back to 12.1 billion sessions in Q4 2021.

Several regions drove high growth in Q4 2021, including: The US (42% YoY), Russia (154% YoY), Turkey (75% YoY), and Indonesia — who saw over 9x growth YoY — surpassing user sessions in China.

Fostered by new players, partnerships, delivery, quick-fulfilment, user demand continued to increase throughout the year, with users spending more sessions than ever in Q4. Dive deeper in data.ai's <u>market level report</u> to see how downloads and sessions stack up.

Quarterly Sessions Spent in Food & Drink Apps Growth Over Time



Top Keywords by iOS Search Volume Among Food & Drinks Apps

Indonesia

mcdonalds dominos kenangan kenangan starbucks resep KOpi pizza hut

FOOD DELIVERY

QSR & FAST-CASUAL

GENERIC KEYWORDS

DISCOVERY / REWARDS / RECIPES

Source: data.ai Intelligence Note: Top 10 keywords searched on iPhone within each region, ranked by average est. keyword search volume in 2021

FOOD & DRINK

Established Markets: QSR Terms & Delivery Dominated the Top Searches in 2021

In established markets, users tend to search for branded keywords. In emerging markets for mobile Food & Drink, brand awareness remains an opportunity.

For many categories on mobile, branded keywords top the charts by app store search traffic. In this case, what users wanted, they searched for. In markets such as the US, UK, and France, branded food delivery keywords ranked among the top terms, followed by QSR brand names. By comparison, top searches in Indonesia, one of the fastest growing markets for food and drink apps, were almost exclusively QSR (8 of 10).

Generic keyword opportunities within ASO surfaced in many other markets — in 2021, user searches for "food", "delivery" and "coffee" were on the rise. "Food" was a top 5 keyword in several regions, ranking as the #1 searched keyword in Canada, Mexico, and Australia, and at #2 in Turkey and #3 in Brazil.

<u>Use the Keyword Search report to understand where competitors</u> <u>stack up for the top organic keywords in each country.</u>

International Launches& Recent AcquisitionsDrive Rapid Growth for10-Minute Delivery

In 2020, consumers wanted delivery. In 2021, consumers wanted delivery...now. Hyper-fast grocery delivery apps grew at speeds faster than their delivery times.

Turkish delivery company <u>Getir</u> hit nearly 7 million downloads worldwide in Q4 2021, up 105% from Q1 - driven by international expansion. After making their <u>first acquisition</u> in July to expand into Spain and Italy, <u>Getir acquired UK-based rival Weezy</u> in November just weeks before starting operations in the US — wrapping up 2021 with services in <u>Chicago, NYC, and Boston</u>.

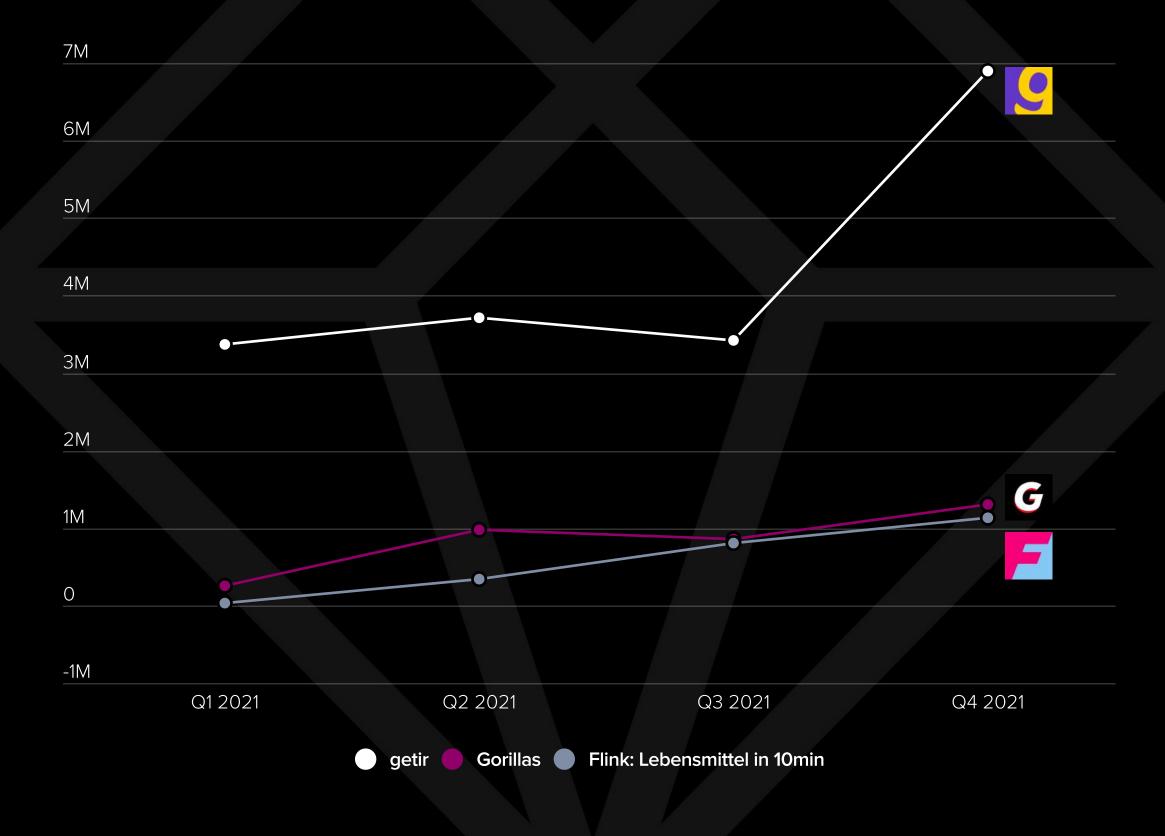
Germany-based *Gorillas* and *Flink* are among several rapidly growing players both reaching over 1 million global downloads in Q4.

Dive into emerging trends and players even further.

Use data.ai to help <u>uncover new and emerging</u>

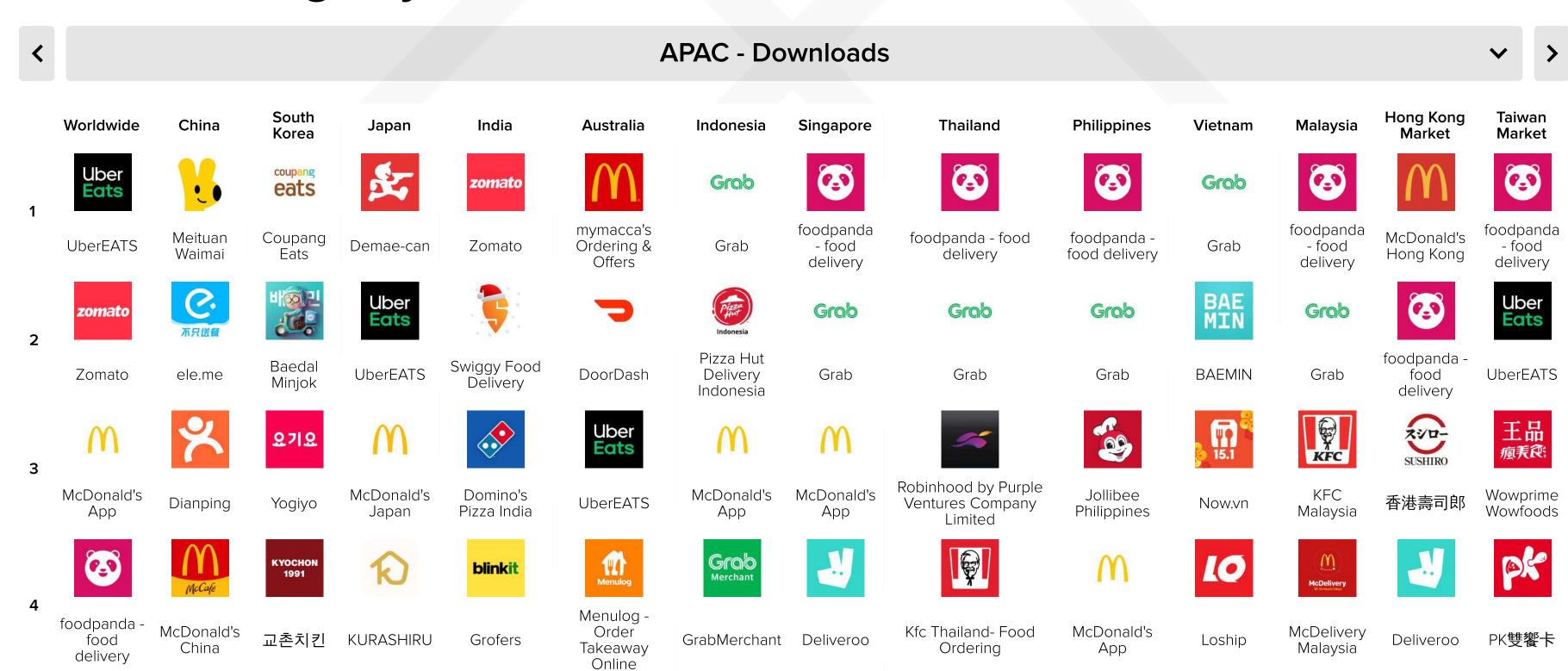
<u>competitors</u> driving global growth within rapid delivery.





Source: data.ai Intelligence Note: iOS and Google Play combined; Select top delivery apps marketed as having "10-minute delivery"

2021 Rankings by Market | Food & Drink



Learn More: Uncover the <u>Top Food & Drink Apps by Yearly Downloads</u>

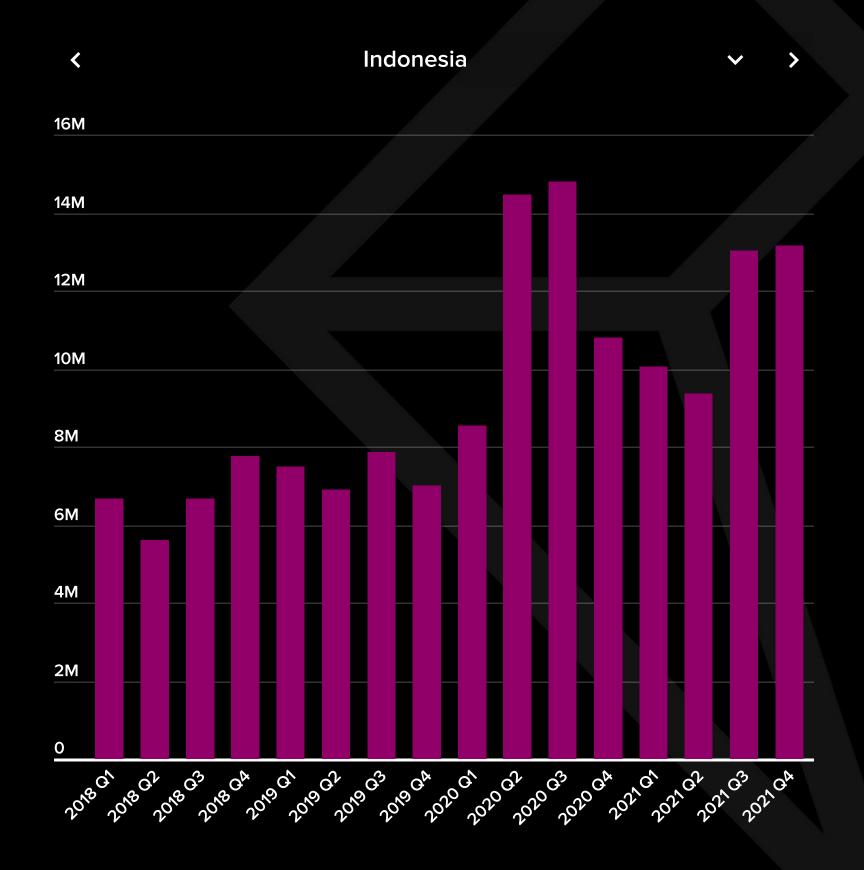
Health & Fitness

In 2021, mobile apps became more integrated in our daily lives as people aimed to enrich their lives while staying at home amidst Covid-19. We believe this trend will continue as mobile apps become more tailored to meet individual consumer needs. In the healthcare domain, we believe that more people will be using smartphones, tablets, and wearable devices even more for health management, diagnosis, and treatment.

Takuma Ishibashi Executive Director, Eisai Co., Ltd.



Quarterly Health and Fitness App Downloads by Country



Source: data.ai Intelligence
Note: Downloads across iOS, Google Play; China is iOS only

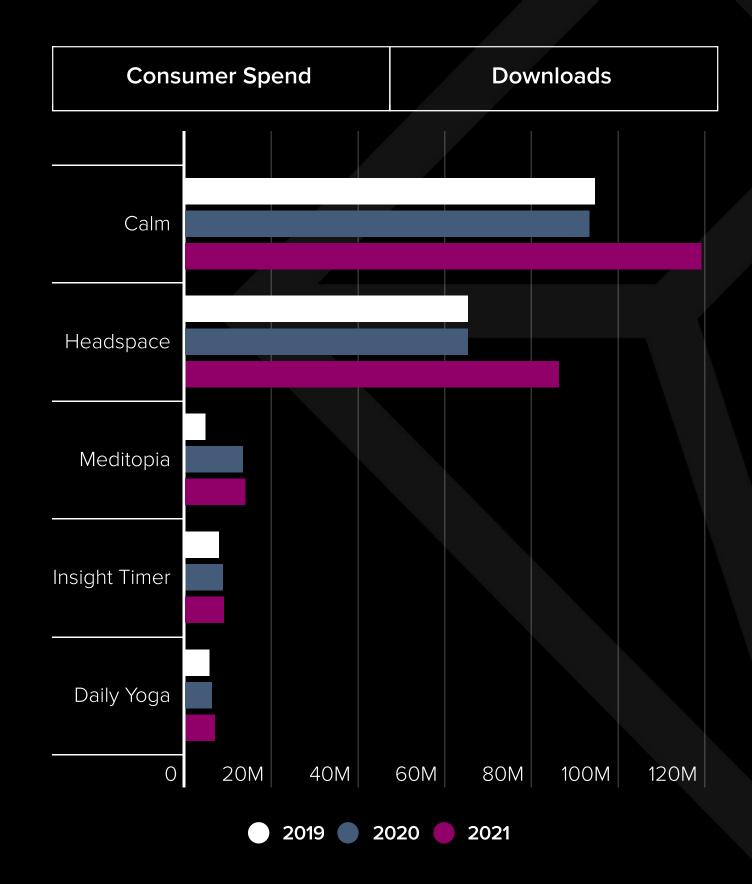
HEALTH & FITNESS

Indonesia's Health & Fitness App Downloads Was 56% Higher Than Pre-Covid Levels in 2021 as Health & Wellbeing Are Top of Mind 2 Years Into the Pandemic

Worldwide downloads of Health and Fitness apps remained high despite seeing a slight softening from a pandemic-induced high in 2020 for most countries. While China and the United States were two markets that did not see their 2021 download volumes surpass pre-pandemic levels in 2018, there were still areas of download growth. Despite this, meditation, fitness and mental health apps saw sustained popularity YoY.

Mobile is a pulse check of consumer sentiment. Health, fitness and mental wellbeing are top of mind for consumers. <u>Monitor market shifts in data.ai.</u>

Consumer Spend & Downloads Among Top Most Downloaded Meditation Apps Worldwide



Source: data.ai Intelligence

Note: Revenue and Downloads across iOS, Google Play

HEALTH & FITNESS

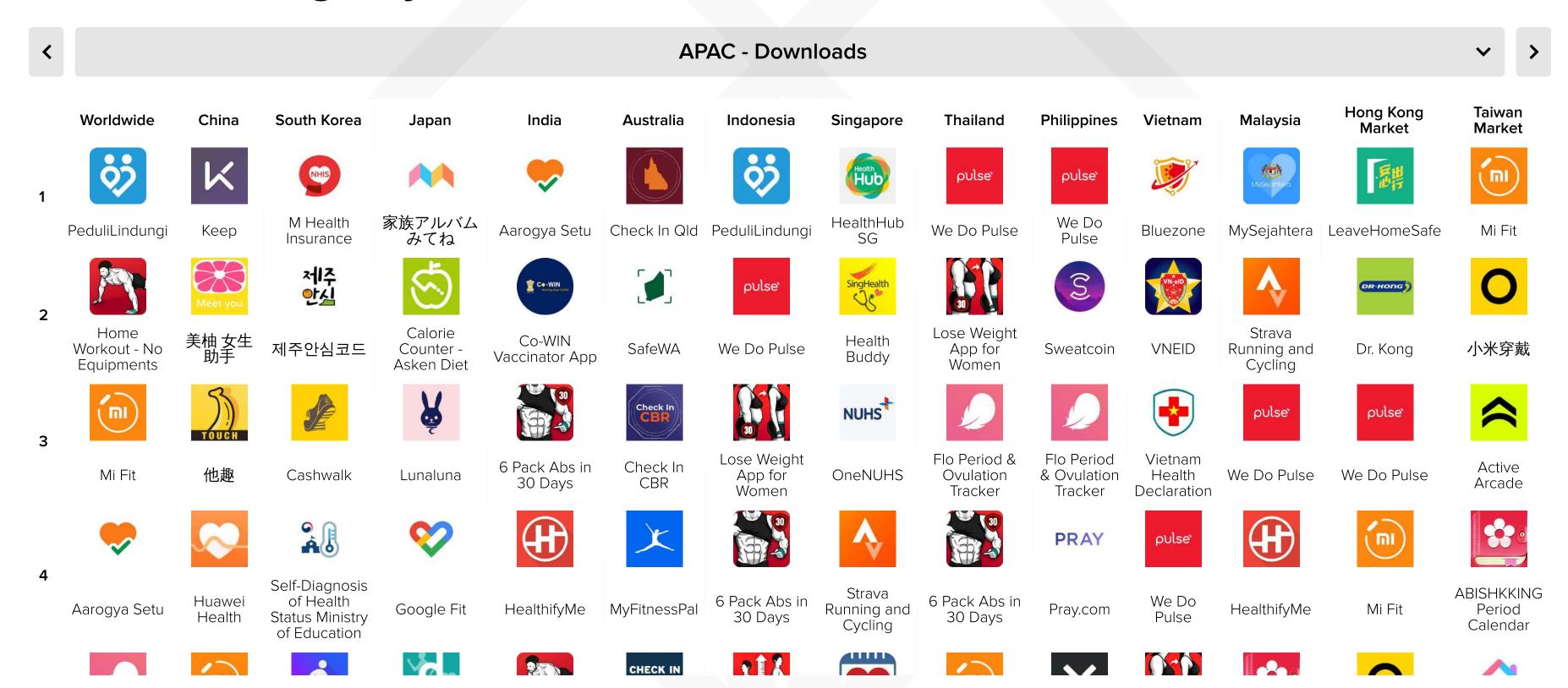
The Top 5 Downloaded Meditation Apps Saw 25% Growth YoY in Consumer Spend Following Record Downloads in 2020

Meditation apps are becoming a fast-growing subcategory within Health and Fitness apps, accelerated by the global pandemic at the start of 2020 that has since forced many to remain indoors as lockdowns become the sudden norm.

<u>Calm</u> remains the most downloaded meditation app both in 2020 and 2021 worldwide, with <u>Headspace</u> and <u>Meditopia</u> rounding out the top 3. Although downloads softened in 2021, both <u>Calm</u> and <u>Headspace</u> saw total time spent in their Google Play apps increase YoY by 12% and 15%, respectively.

More time spent in app can translate to higher revenue despite declines in app downloads. <u>Compare time spent among meditation apps to see how it correlates with revenue.</u>

2021 Rankings by Market | Health & Fitness



Learn More: Uncover the Top Health & Fitness Apps by Yearly Downloads

Social

Mobile augmented reality experiences are changing the way we live, from how we communicate and have fun to how we shop for and discover products.

With over 6 billion AR interactions on Snapchat every day, these aren't distant hopes; it's the new reality. Thanks to the power of mobile, this cutting edge technology is at the fingertips of everyone with a cell phone right now, and as we look ahead to 2022, AR will continue to evolve and grow in utility for both consumers and businesses.

Chip Kanne Head of North America Emerging Sales Snap



SOCIAL

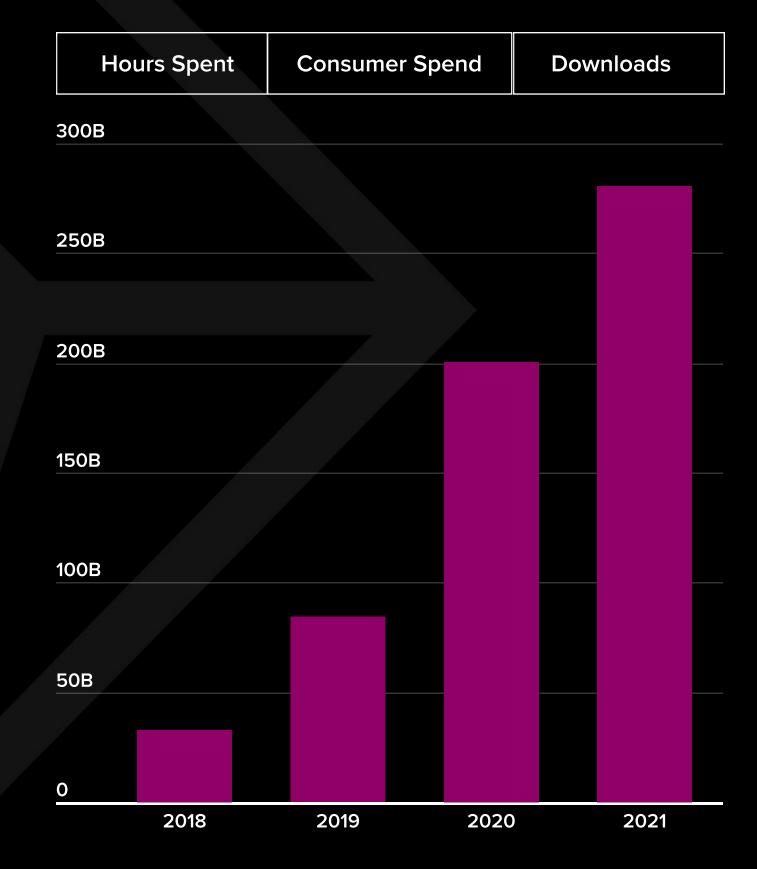
All Eyes on Live Streaming: Time Spent Grew 9x in 4 Years — Cultivating the Deepest Social Engagement

In 2021, time spent in the top 25 live streaming apps outpaced the social market overall year over year by a factor of 9 — YoY growth of 40% compared to all social apps at 5%.

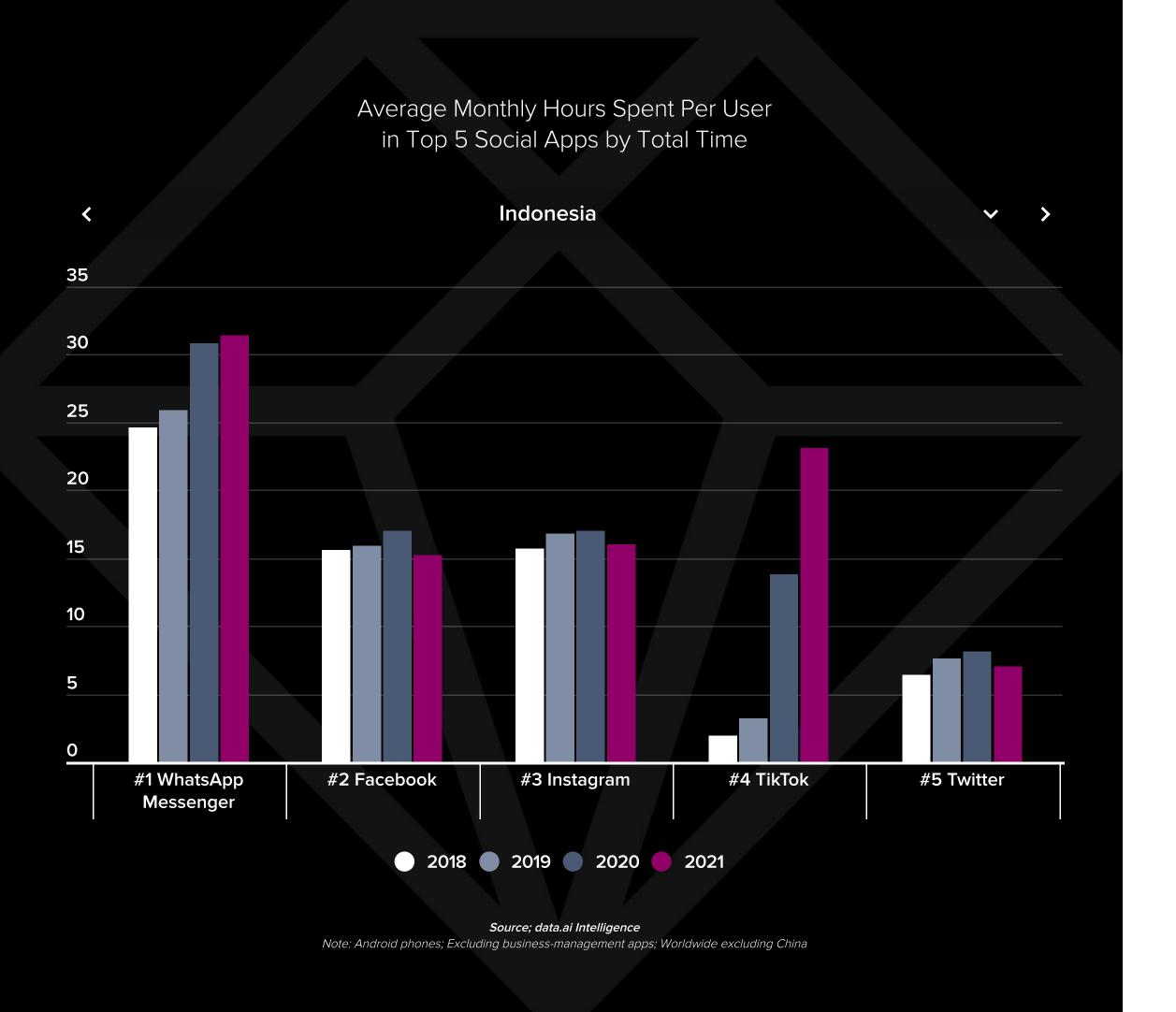
<u>Live streaming apps are also driving consumer spend in Social apps</u> as consumers 'tip' their favorite content creators — with global consumer spend in the top 25 live streaming apps in 2021 growing 6.5x from 2018 and 55% YoY.

Social apps are the linchpin to connection in our mobile-first world. Live streaming apps are changing the game — providing opportunities for live shopping, content creator compensation, creative empowerment and the rise of authenticity in social apps. Keep on top of the latest social trends in data.ai.

Global Growth of Live Streaming Apps Among Top 25 Apps



Source: data.ai Intelligence Note: Downloads and Consumer Spend across iOS, Google Play; China is iOS only. Time spent is Android phones only



SOCIAL

TikTok's Rocket Ship Growth: YoY Growth Rates As High As 75%

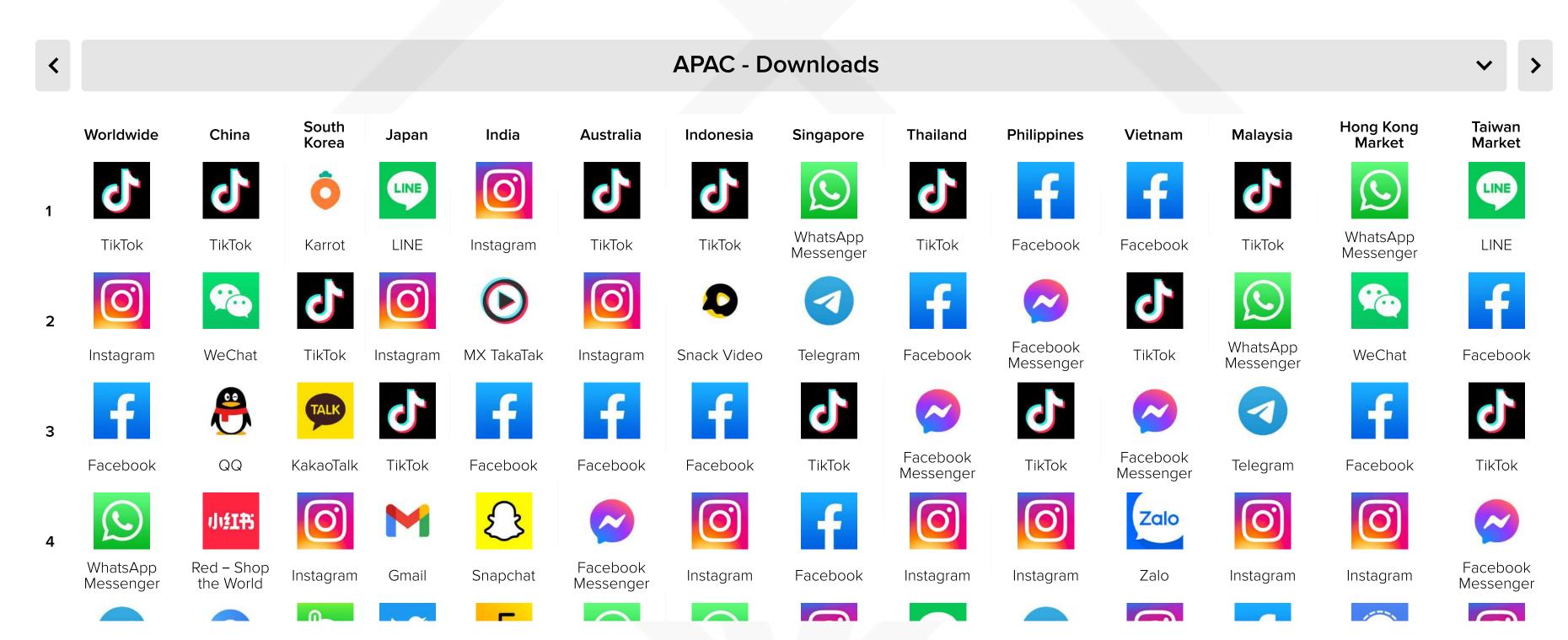
<u>TikTok</u> was a standout winner in per user engagement among the top 5 social apps commanding the most time spent in 2021.

It is notable that *TikTok* has seen the greatest in depth of engagement over 4 years and had a standout year in 2021, off the back of an already record-breaking 2020.

Meta properties in India benefited from the *TikTok* ban in 2021, with engagement deepening in both *Facebook* and *Instagram* by 15% and 35% respectively.

Explore evolving engagement patterns, including average time spent, demographic base and cross-app usage of top players to monitor how they are carving out mindshare in 2022 and beyond.

2021 Rankings by Market | Social



Learn More: Uncover the <u>Top Social Apps by Yearly Downloads</u>

Source: data.ai Intelligence Note: Combined iOS and Google Play; China is iOS only; Market-level rankings; Excluding dating apps

Travel

Traveloka has experienced tremendous years of comeback recovery and growth as Southeast Asia's Lifestyle Superapp. With a new normal paradigm and our business expansion spanning from travel to local services to financial services; it is pivotal for Traveloka to equip ourselves with best-in-class technology, product innovation, and data-driven marketing. In our mission to fulfill the customers' lifestyle needs and aspirations, we are thankful to be partnering with data.ai to help us in navigating market growth landscape and becoming a think tank partner in many of our strategic initiatives, especially during the pandemic.

Terry Santoso
VP Platform Marketing
Traveloka



Downloads of Travel Apps Rebound by 20% in H2, Driven by Sharp Increases from July to Dec 2021

The second half of 2021 showed positive trends for travel on mobile. H2 2021 downloads hit 1.95 billion worldwide, nearing pre-pandemic levels of 2.08 billion in H2 2019.

According to Tripit.com, <u>82% of Americans traveled in the Summer of 2021</u>. During this time, the mobile travel market saw activity closely aligned to levels in 2019. In July 2021, travel apps reached 40 million downloads in the US, the highest since August 2019.

Several countries in Europe saw strong rebound rates in H2 2021 after loosening shelter-in-place restrictions and travel regulations. In fact, travel growth increased so steeply over the peak summer season that downloads in Germany, Turkey, and India were up 7%, 22%, and 5% compared to H2 2019, respectively.

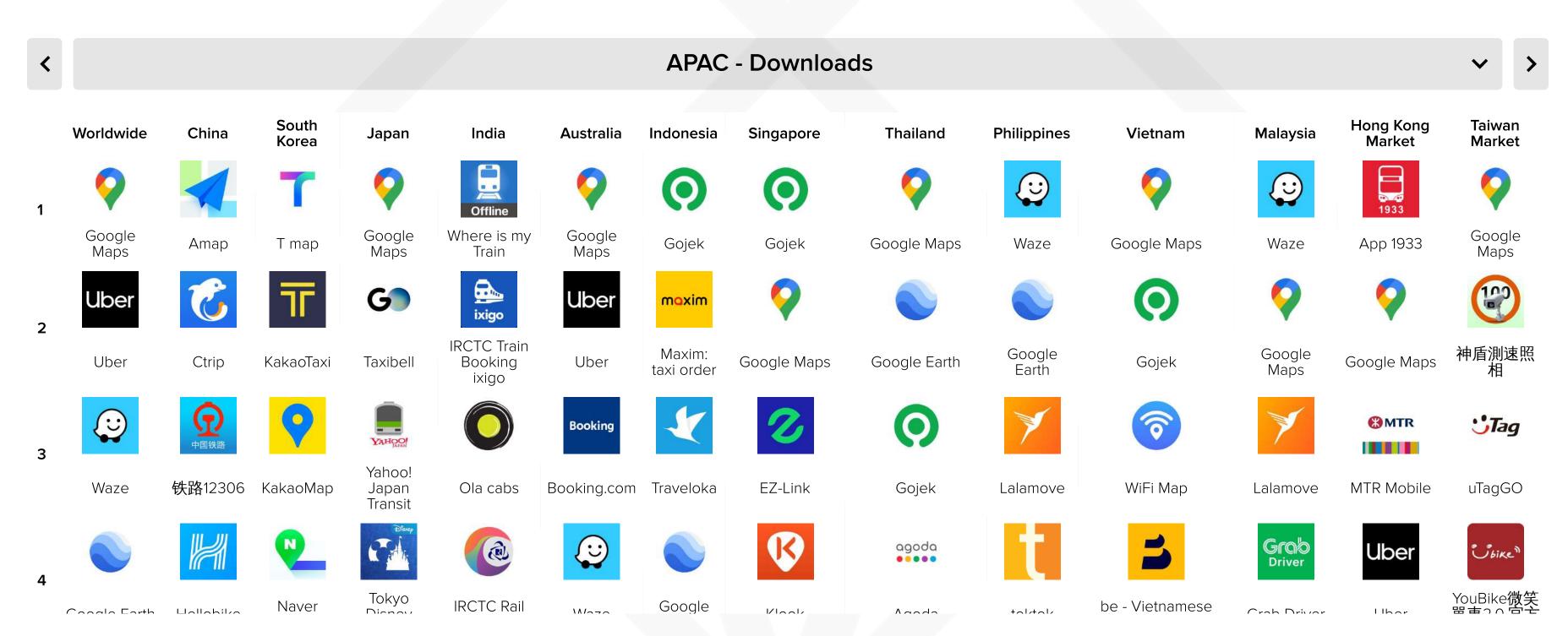
<u>Identify the top apps driving growth</u> within the Travel & Navigation market.

Monthly Downloads of Travel & Navigation Apps



Source: data.ai Intelligence
Note: iOS and Google Play; China is iOS only

2021 Rankings by Market | Travel



Learn More: Uncover the <u>Top Travel Apps by Yearly Downloads</u>

Source: data.ai Intelligence Note: Combined iOS and Google Play; China is iOS only; Market-level rankings

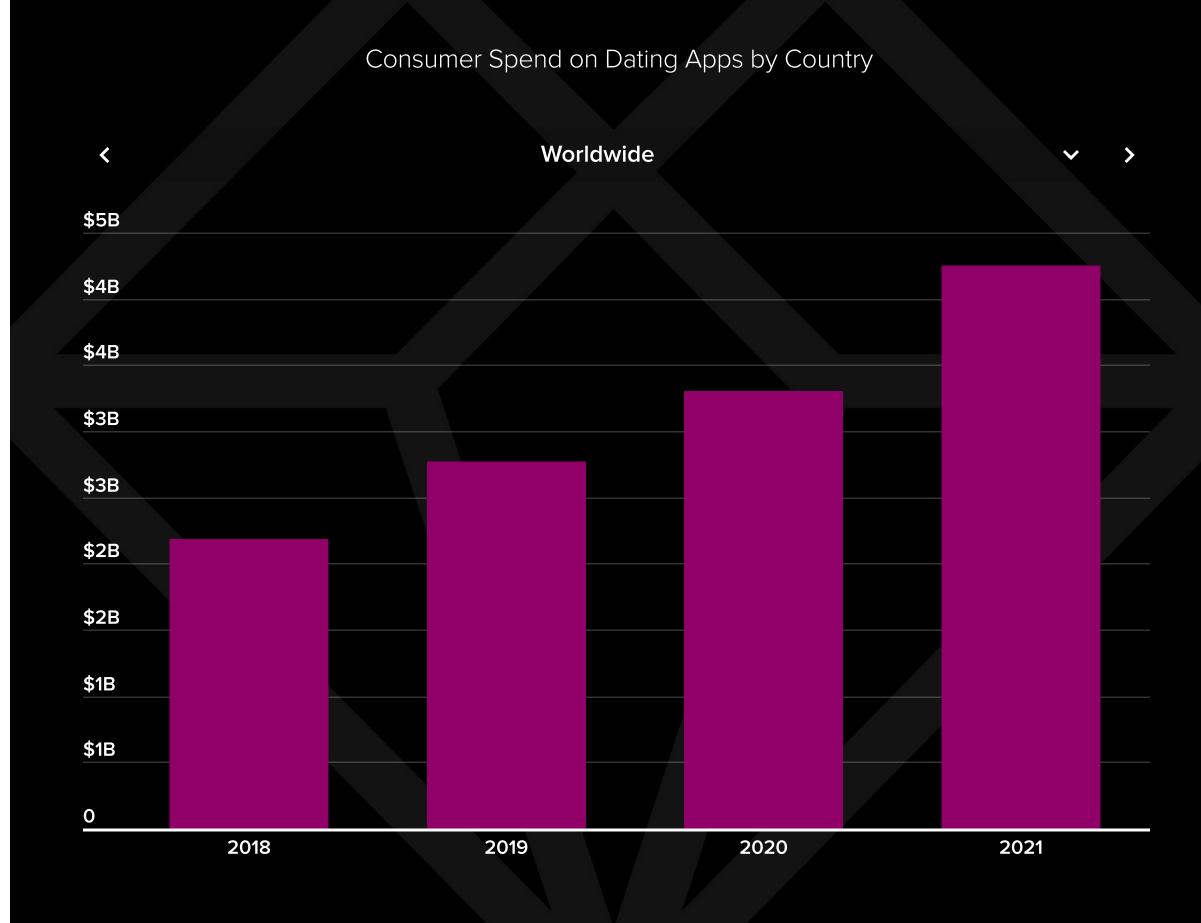
Dating

Consumer Spend on Dating Apps in Indonesia Surpassed \$10M in 2021, a 188% Increase Since 2018 Despite the Pandemic

The unabated growth in consumer spend was primarily driven by the US, Japan, the UK and China, the four largest markets in 2021.

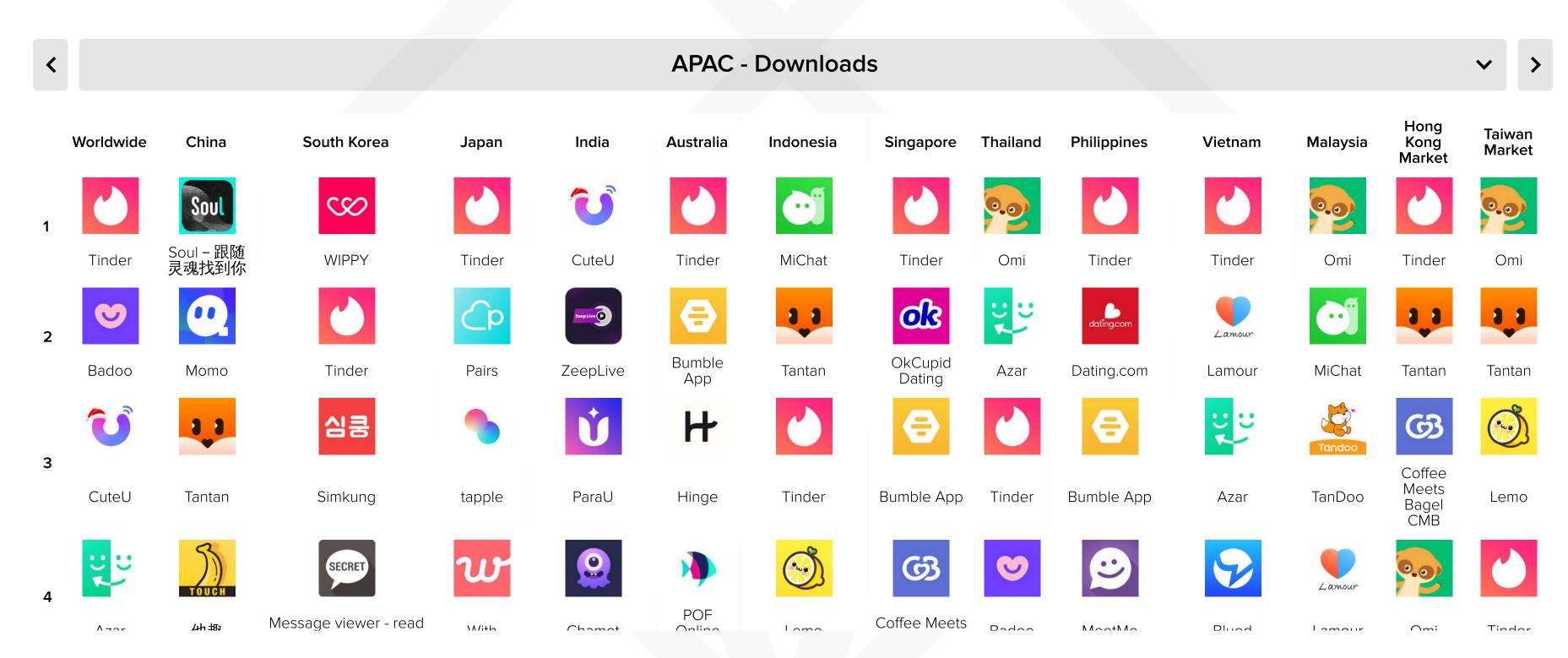
For the US, Germany, Indonesia, and Japan, consumer spend more than doubled since 2018. Despite its population size, India is one region that saw declining consumer spend on dating apps, although it is still up 18% since 2018. India is a unique market where, although users of dating apps may not be spending heavily, more than 75% of Indian daters have started going on hobby dates and more than 50% are thinking of dating as a way to explore. Mobile is perfectly positioned to capture budding demand in this sector.

It is important for dating app publishers to know their primary KPIs early, whether it is maximizing user acquisition or revenue. See how dating apps metrics changed year-over-year in data.ai.



Source: data.ai Intelligence
Note: Consumer Spend across iOS, Google Play

2021 Rankings by Market | Dating



Learn More: Uncover the <u>Top Dating Apps by Yearly Downloads</u>

Source: data.ai Intelligence Note: Combined iOS and Google Play; China is iOS only; Market-level rankings

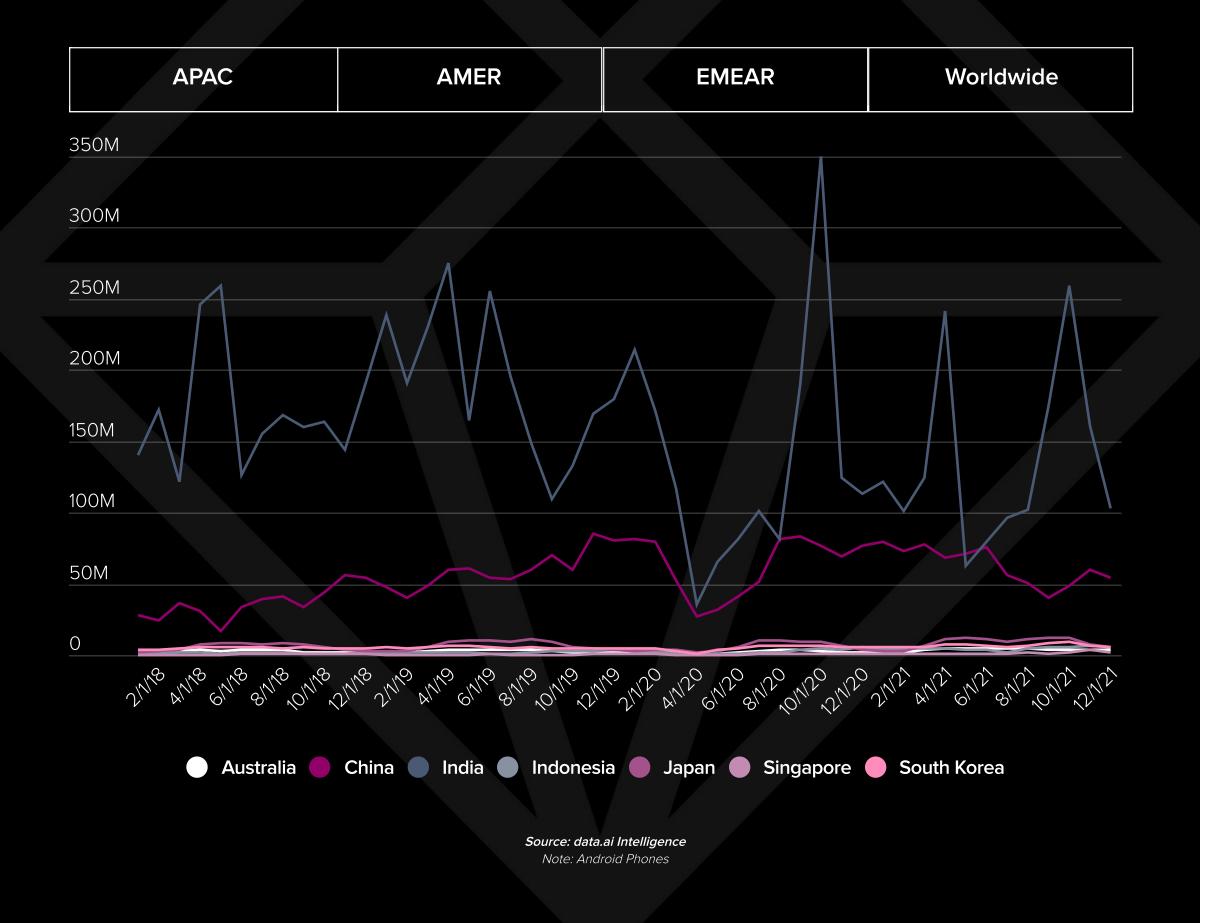
Other Industries Embracing Mobile

Education apps have seen a tremendous surge in adoption during the pandemic. At Zenius, we are constantly innovating to improve our product suite to provide a great learning experience for millions of Indonesian students, and to enable them to continue to learn and grow amidst the pandemic. data.ai plays an important role in our innovation process - We are able to monitor the industry landscape with a wide angle lens and analyse market responses to our new product launches.

Sony Radhityo
Chief Growth & Product
Zenius



Hours Spent in Sports Apps



SPORTS

Sports Rebounded in 2021: Tokyo Olympics & Return of Live Sports Drives Mobile Streaming

Hungry for new content, eyes returned to sports in 2021. The UEFA Euro Tournament, the return of NFL and fantasy football in the US and the Cricket World Cup in APAC were in high demand following a year with delays and limitations on live sports.

Globally time spent in sports apps rebounded 30% from 2020 back to 2019's pre-pandemic levels. Countries seeing the greatest rebounds included: Singapore (+125%), Canada (+125%), Russia (+120%), Argentina (+105%), Indonesia (+90%), Australia (+85%) and the US (+70%).

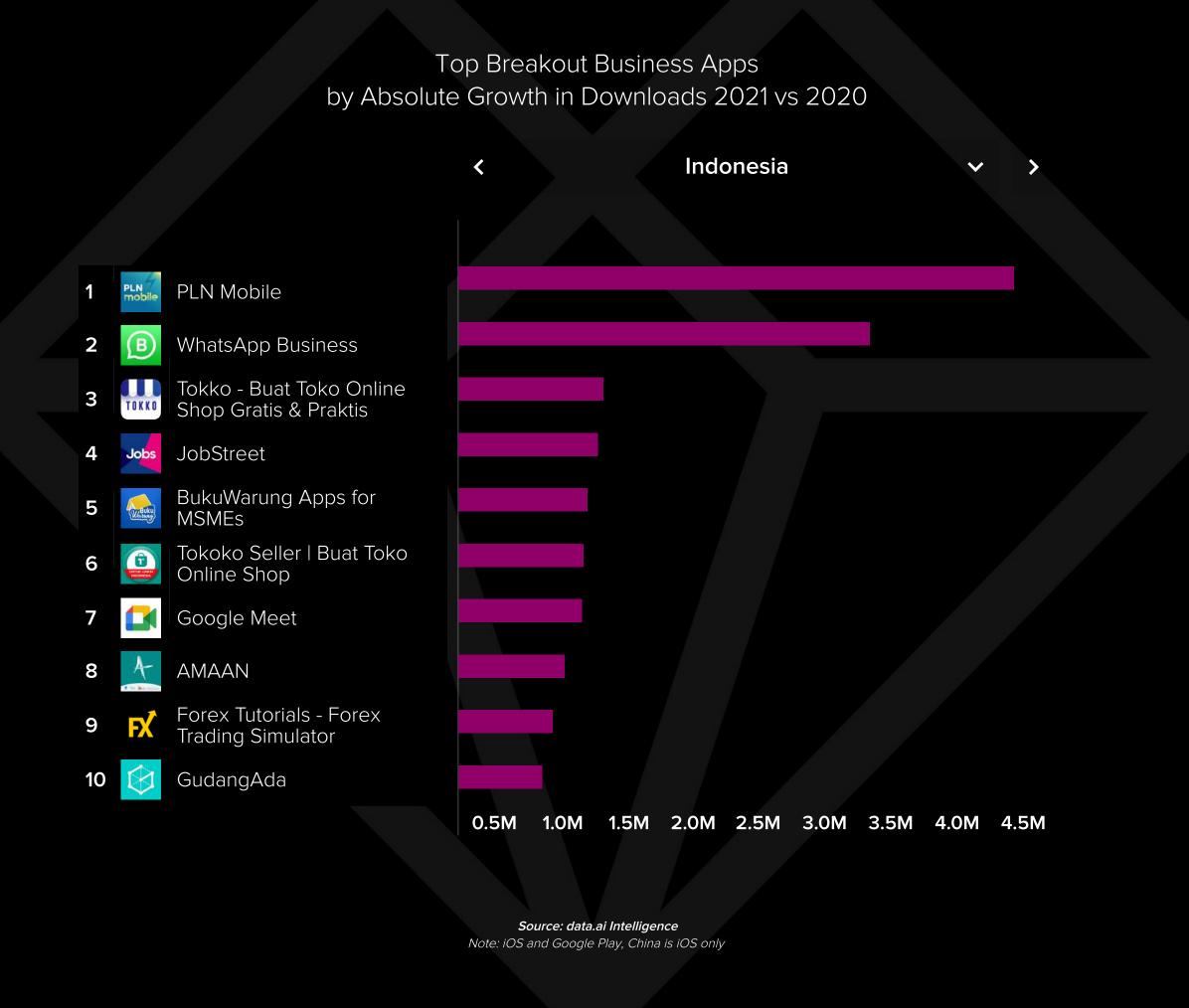
Monitor shifts in seasonality with data.ai. Benchmark your app against market trends to see if you are in-line with, out-pacing or falling behind the market.

The Great Resignation? More Like The MobileEmpowered Work Force

Business management apps such as <u>BukuWarung Apps</u> for <u>MSMEs</u> were among the top breakout apps by downloads in Indonesia, while various job searching platforms (such as <u>JobStreet</u> in Indonesia) gained traction in multiple regions, including the UK and India in 2021.

Choosing to work for themselves: Delivery driver apps like <u>DoorDash Driver</u> (#1 breakout business app in the US seeing 60% growth YoY from an already high level of demand in 2020), <u>Deliveroo Rider</u> (#7 breakout app in the UK) and <u>Baemin Riders</u> (#3 in South Korea) saw record levels of demand. Apps to empower individuals to earn extra money or work for themselves like <u>WhatsApp Business</u> (#1 Worldwide) and <u>GetNinjas</u> in Brazil (#2) also saw standout growth in demand as consumers turned to mobile for career freedom.

Monitor how consumer behavior manifests on mobile with data.ai. Uncover opportunities, meet your customer needs and identify nascent trends before your competitors.



MEDICAL

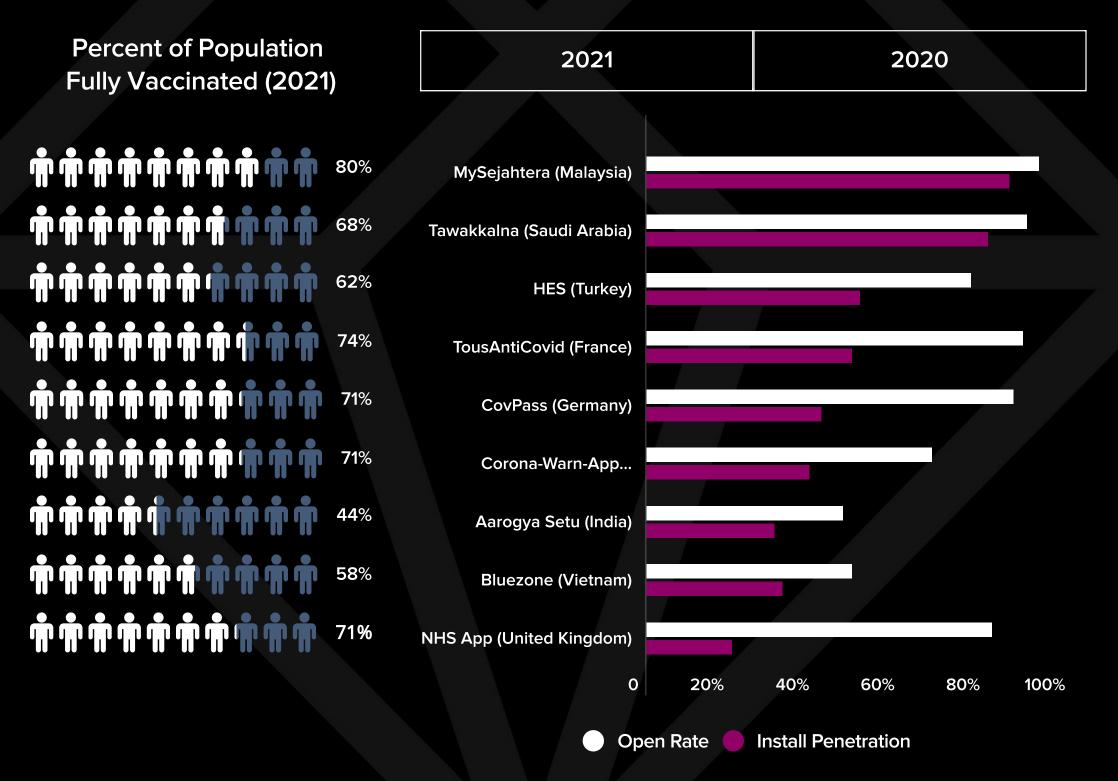
Vaccine Rollout & App Engagement Are Crucial Drivers of the Ongoing Effort to Combat Covid-19

Each market has a unique way of handling the COVID-19 pandemic at the national level. In the UK, COVID-19 information and vaccine cards were incorporated into the national healthcare app (*NHS*). App downloads increased by >300% YoY and open rate reached 81% in 2021 — showing a highly engaged user base despite a low install penetration.

Other regions have dedicated apps to help users keep track of vaccine and COVID-19 information on the go. <u>Malaysia's MySejahtera</u> and <u>Saudi Arabia's Tawakkalna</u> saw the highest install penetrations and open rates in 2021. <u>Germany's Corona-Warn-App</u> and <u>CovPass</u> tend to be used more by males, as seen among the <u>Top Apps by Likelihood of Use Across</u>. <u>Gender</u>. Not all regions have a unified nationwide app; in the US, for example, it is state-led.

Compare how COVID-19 apps have empowered consumers to trace and connect.

Install Penetration & Open Rate Among Top COVID-19 Apps by Downloads Worldwide in 2021



Source: data.ai Intelligence Note: Android Phones only. Open Rate shows the percent of the install base that opened the app in the given year for each respective country. Install Penetration shows the percent of devices with the Covid-19 app installed for the region where the app is based. CovPass was launched in June 2021 in Germany COVID-19 vaccination rate by country from Johns Hopkins University, December 31, 2021

Top Apps & Games

2021 was a very interesting year with new privacy rules on iOS, changes in app store creatives moderation policy, and the emergence of new big players in the market of app promotion — representing a challenge for the industry as a whole and for us in particular. We're fortunate that we don't have to solve these industry headwinds alone, but in partnership with data.ai.

Petr Abroskin
CMO Search and Portal
Yandex



2021 Rankings by Market | Top Apps

Indonesia < **DOWNLOADS CONSUMER SPEND** MONTHLY ACTIVE USERS WhatsApp Short Videos (Entertainment) TikTok Short Videos (Entertainment) Communication (Social Media) Messenger CapCut Video Editing (Photo & Video) OTT (Entertainment) Facebook Social Networks (Social Media) Media Sharing Networks (Social Comics (Books & Reference) Snack Video Short Videos (Entertainment) Instagram Webtoon Media) File Management (Utility & Shopee Facebook Social Networks (Social Media) Google One E-Commerce (C2C) (Shopping) Productivity) Media Sharing Networks (Social Instagram OTT (Entertainment) Telegram Communication (Social Media) Media) Digital Wallets & Payment eBooks (Books & Reference) DANA GoodNovel Tokopedia E-Commerce (C2C) (Shopping) (Finance) Shopee E-Commerce (C2C) (Shopping) eBooks (Books & Reference) TikTok Short Videos (Entertainment) Innovel WhatsApp Gojek Communication (Social Media) Communication (Social Media) Transportation (Travel) GetContact Messenger Facebook PeduliLindungi Medical Health (Health & Fitness) **BIGO LIVE** Live Streaming (Entertainment) Communication (Social Media) Messenger Network Management (Utility & WeSing Communication (Social Media) Karaoke (Entertainment) MyTelkomsel Telegram

Learn More: Uncover the Most Popular Apps By Market

Source: data.ai Intelligence Note: Downloads and consumer spend based on combined iOS App Store and Google Play. MAU based on Combined iPhone and Android Phone Monthly Active Users; Excluding pre-installed Apps. Market-level rankings

Productivity)

2021 Rankings by Market | Top Games

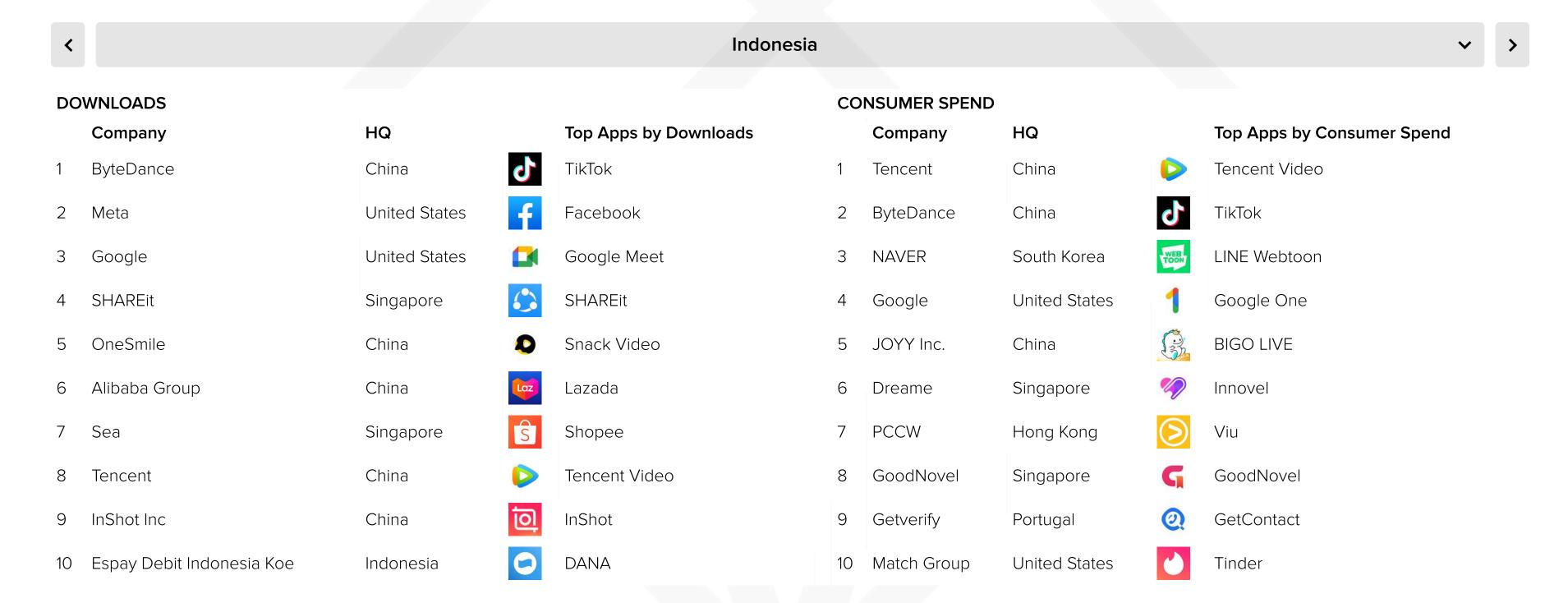
DOWNLOADS CONSUMER SPEND MONTHLY ACTIVE USERS Mobile Legends: Bang Free Fire Higgs Domino Island MOBA (Action) Dominoes (Casino) Battle Royale (Shooting) Mobile Legends: Bang Mobile Legends: Bang MOBA (Action) MOBA (Action) **PUBG MOBILE** Battle Royale (Shooting) Free Fire Free Fire Battle Royale (Shooting) Higgs Domino Island Dominoes (Casino) Battle Royale (Shooting) WormsZone.io 4 Genshin Impact Higgs Domino Island Open World RPG (RPG) .io (Hypercasual) Dominoes (Casino) SAKURA School WormsZone.io Avatar Life (Simulation) State of Survival 4X March-Battle (Strategy) .io (Hypercasual) Island King - Coin Creative Sandbox Rise of Kingdoms Minecraft Pocket Edition Luck Battle (Party) 4X March-Battle (Strategy) (Simulation) Mini Games Collection Creative Sandbox Creative Sandbox Stickman Party ROBLOX **ROBLOX** (Simulation) (Simulation) (Party) Ludo King **PUBG MOBILE** Clash of Clans Board Game (Tabletop) Battle Royale (Shooting) Build-Battle (Strategy) Clash of Clans Pet (Simulation) Build-Battle (Strategy) Avatar Life (Simulation) Ragnarok X: Next 10 **PK** XD Candy Crush Saga MMORPG (RPG) Avatar Life (Simulation) M3-Saga (Match) Generation

Indonesia

Learn More: Uncover the Most Popular Games By Market

Source: data.ai Intelligence Note: Downloads and consumer spend based on combined iOS App Store and Google Play. MAU based on Combined iPhone and Android Phone Monthly Active Users; Excluding pre-installed Apps. Market-level rankings

2021 Rankings by Market | Top Companies - Apps



Learn More: Uncover the Top Apps Publishers Across Different Markets

Source: data.ai Intelligence Note: Combined iOS and Google Play; China is iOS only; Market-level rankings

2021 Rankings by Market | Top Companies - Games

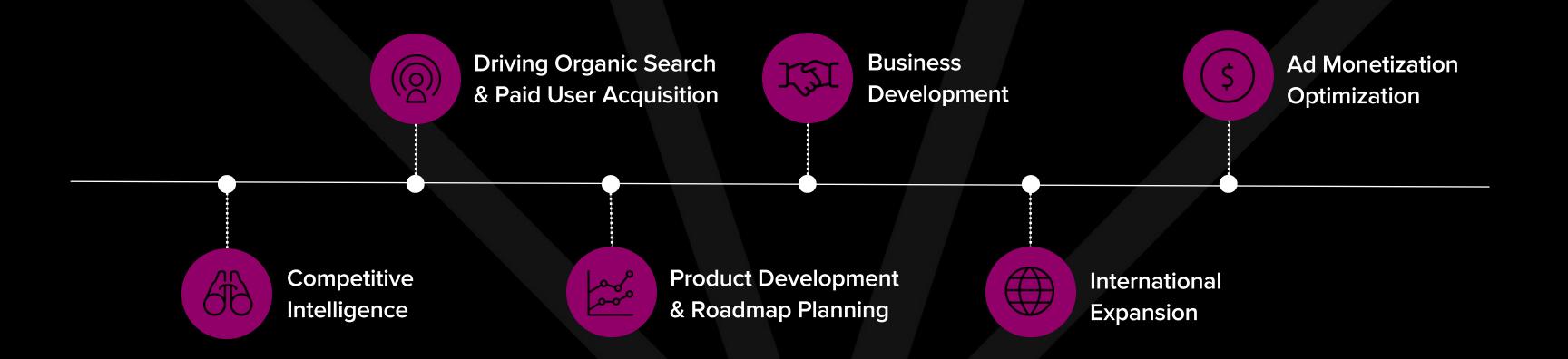
Indonesia **CONSUMER SPEND DOWNLOADS** HQ Top Games by Downloads HQ Top Games by Downloads Company Company Free Fire Baby Panda World BabyBus Sea China Singapore Island King - Coin Adventure Mobile Legends: Bang Bang AppLovin **United States** ByteDance China WormsZone.io Higgs Domino Island Azur Interactive Games Cyprus Boke China Prison Escape: Stickman Story Genshin Impact OneSoft Vietnam miHoYo China Gardenscapes - New Acres ironSource Bridge Race Playrix Israel Ireland DOP 2: Delete One Part Rise of Kingdoms 6 SayGames Belarus Lilith China Jinke Culture - Outfit7 My Talking Tom Friends State of Survival China FunPlus China **PUBG MOBILE** Roof Rails Tencent China Voodoo France Higgs Domino Island Clash of Clans Supercell Boke China Finland Phone Case DIY **ROBLOX** Crazy Labs Roblox **United States** Israel

Learn More: Uncover the Top Games Publishers Across Different Markets

Source: data.ai Intelligence Note: Combined iOS and Google Play; China is iOS only; Market-level rankings

APP ANNIE

We Fuel Mobile Excellence & Monetization



Disclaimer

data.ai is a mobile market estimate service provider. data.ai is not registered in any investment advisory capacity in any jurisdiction globally, and does not offer any legal, financial, investment or business advice. Nothing contained in this communication, or in any data.ai products, services, communications, or other offerings, should be construed as an offer, recommendation, or solicitation to buy or sell any security or investment, or to make any investment decisions. Any reference to past or potential performance is not, and should not, be construed as a recommendation or as a guarantee of any specific outcome. You should always consult your own professional legal, financial, investment and business advisors. Additionally, by providing the information herein, data.ai does not make any representations or warranties and does not undertake any legal or contractual obligations whatsoever. No liability may accrue to data.ai as a result of providing this information to you.

View Report Methodology



Request a Demo Today

data.ai