## STATE OF MOBILE 2022

### **EXECUTIVE SUMMARY**

## 2021 Mobile Landscape at a Glance

New App Downloads

230B

App Store Spend

\$170B

Daily Time Spent
Per User

4.8 Hrs

Mobile Ad Spend

\$295B

Number of Apps >\$100M Spend

233

+5%

YoY Growth

iOS, Google Play, Third-Party Android in China

> 435,000 apps downloaded per minute in 2021 +19%

YoY Growth

iOS, Google Play, Third-Party Android in China

>\$320,000 spent per minute in 2021

+30%

2Y Growth

Android Phones; Weighted Average Among Top 10 Mobile-First Markets

1/3 of daily waking hours

**+23%**YoY Growth

would be #41 largest country ranked <u>among</u> <u>global economies</u>

+20%

YoY Growth

iOS, Google Play, Apps and Games

As compared to only 38 Movies with > \$100M global Box
Office Proceeds
in 2021

## Contents

- Macro Mobile Trends
- Gaming
- <u>Finance</u>
- Retail
- Video Streaming
- Food & Drink
- Health & Fitness
- Social
- Travel
- 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

Our partnership with data.ai has helped us better navigate the gaming market, providing us insight and assistance in the decision-making process. Our favorite has to be Game IQ's pioneering capability to present a clearer picture of our clientele and allow us to create a tailor-made experience.

Matt Liu
Global Publishing & Marketing Vice General Manager
NetEase Games



## Mobile-First Markets Spend 1/3 of Waking Hours on Mobile

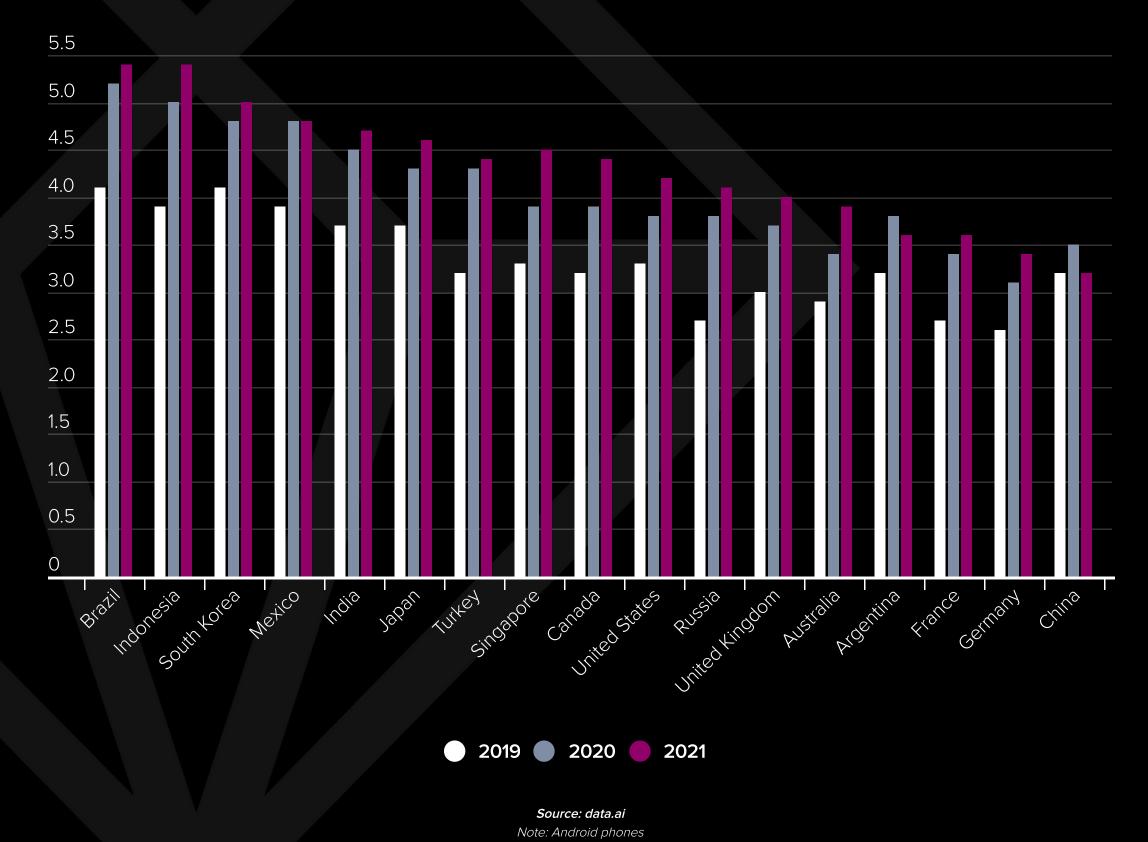
Across the top 10 markets analyzed, the weighted average surpassed 4 hours 48 minutes in 2021 — up 30% from 2019.

Users in Brazil, Indonesia and South Korea surpassed 5 hours per day in mobile apps in 2021.

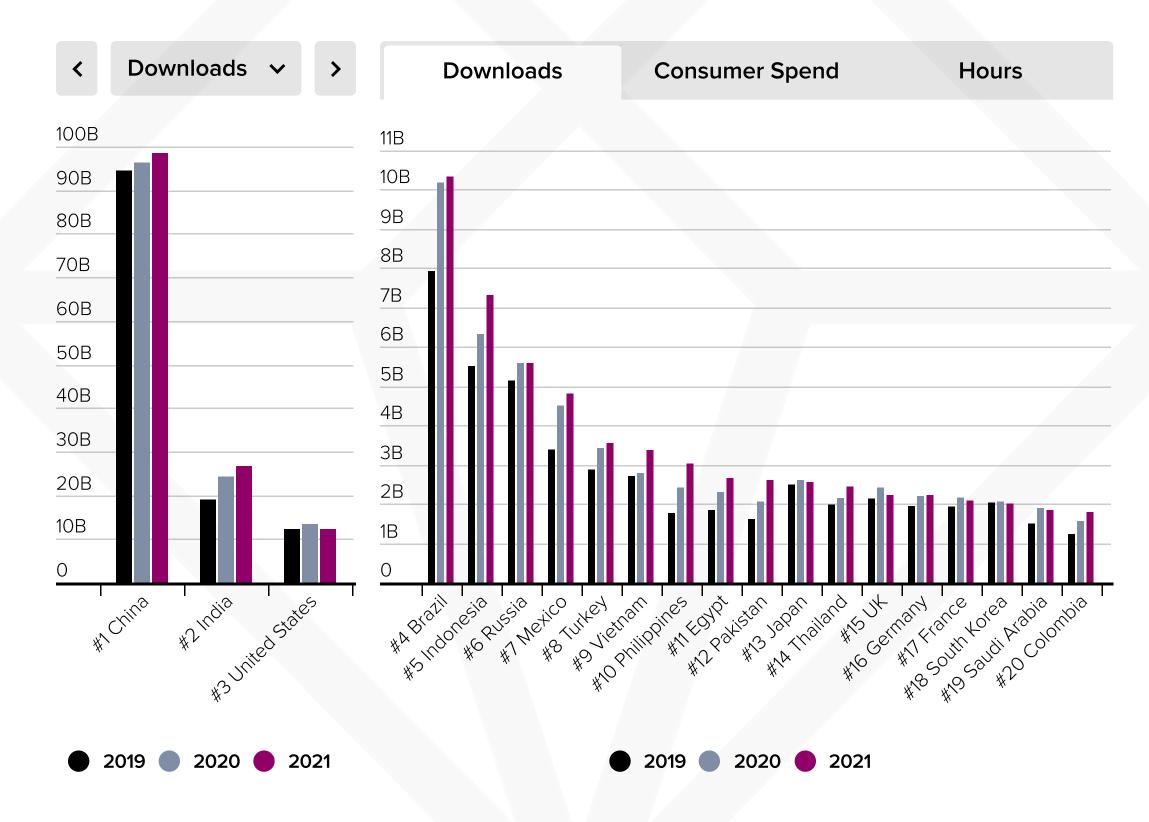
The average American watched 3.1 hours of TV a day, whereas they spent 4.1 hours on their mobile device in 2021.

Mobile usage estimates highlight growth sectors 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

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

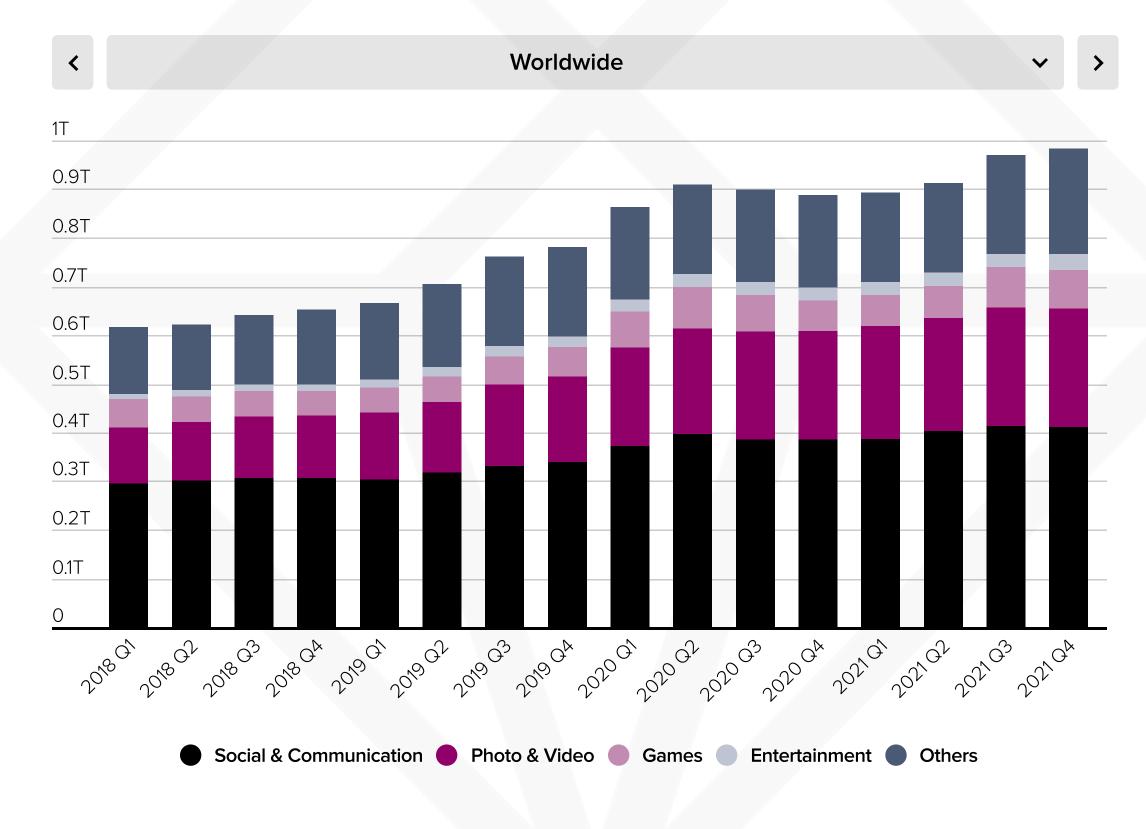
The US has seen phenomenal growth in consumer spend, adding an additional \$43 billion in 2021, \$10.4 billion more than 2020, equating to 30% growth YoY as mobile gaming and in-app subscriptions go mainstream.

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
Note: Android phones

### MACRO MOBILE TRENDS

## 7 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

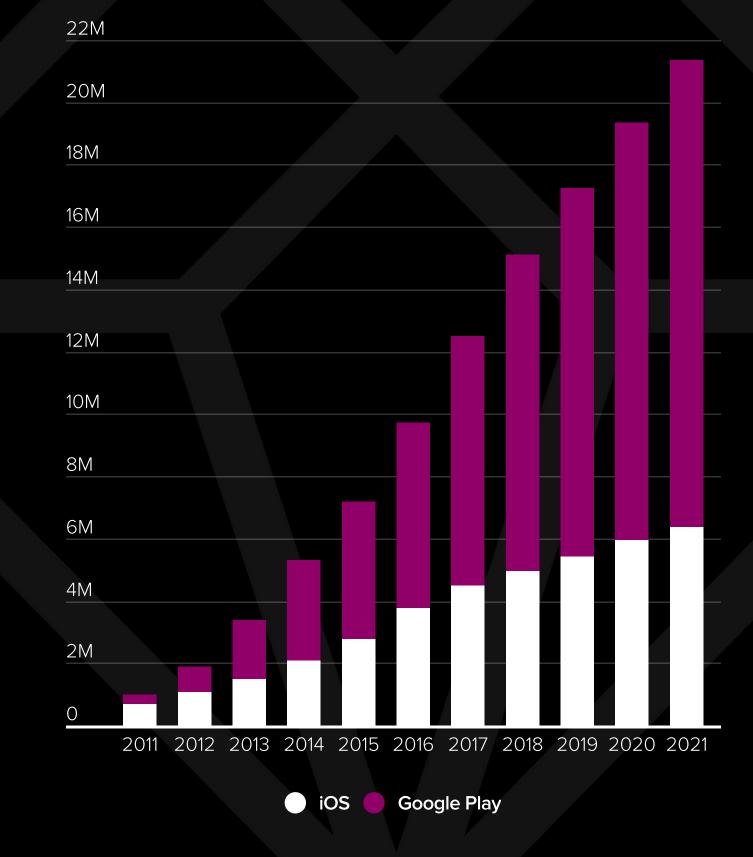
This brings the total of apps and games ever released on iOS and Google Play to over 21 million.

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. 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

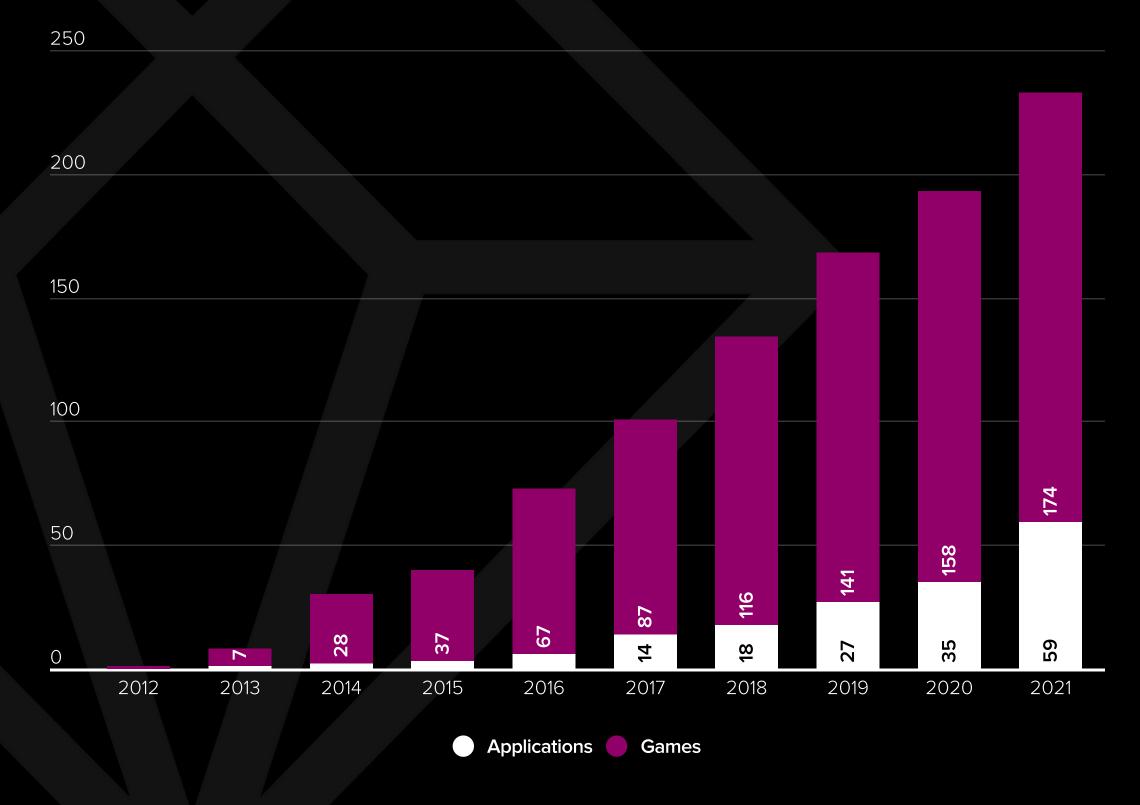
## 233 Apps & Games Generated Over \$100 Million Dollars Annually in 2021

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

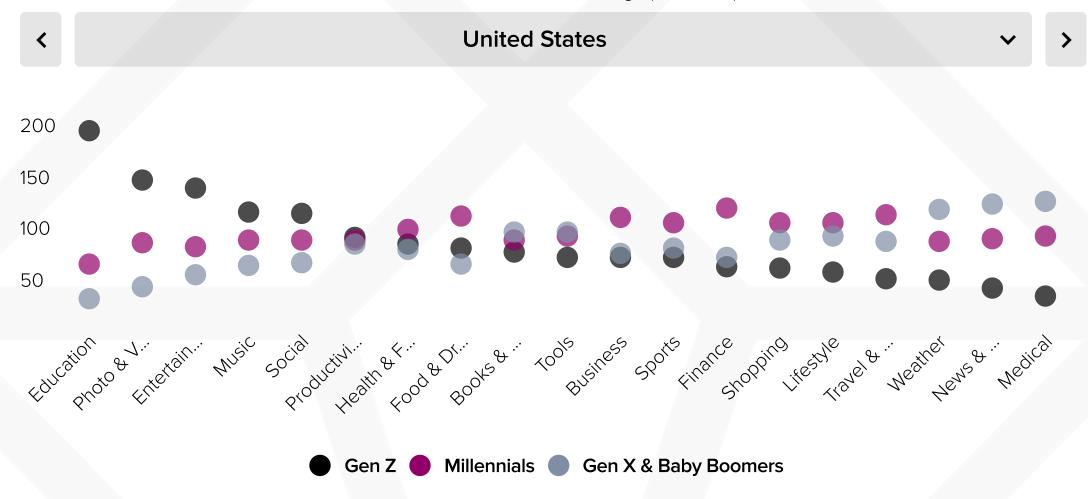


### Source: data.ai

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

## **Average Age Group Index Among Top Apps Per Category**

Index >100 Skews Towards Demographic Group



### Top Apps by MAU by Likelihood of Use

	Gen Z		Millenr	nials	Gen X & Baby Boomers			
1	O	Instagram	f	Facebook	BOM	BOM Weather		
2		Spotify		Facebook Messenger		Check In Qld		
3	N	Netflix		WhatsApp Messenger	SERVICE	Service Victoria		
4		Snapchat	ebay	eBay		Stocard		

**Source:** data.ai Note: 2021, Android phones; Average of Top 20 apps by MAU per category; Gen Z represented by those aged 16 -24; Millennials represented by those aged 25-44; Gen X and Baby Boomers represented by those aged 45+

MACRO MOBILE TRENDS: DEMOGRAPHICS

## Gen Z is a Mobile Social & Video First Generation

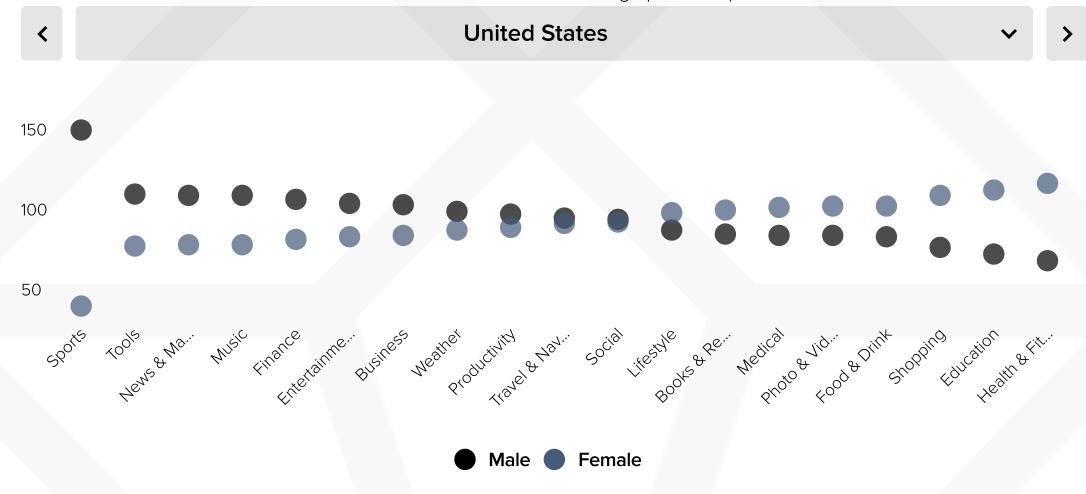
Apps in categories that are already highly relevant to Gen Z can be excellent partners to help you increase engagement, including Photo & Video, Entertainment, and Social.

Finance and Shopping apps haven't managed to reach a broad Gen Z audience, but these categories have experienced strong growth YoY and represent a promising area for investment. These categories tend to skew more towards Millennials at this stage.

Mobile data unearths opportunities for reaching Gen Z: whether its an underserved market or a highly-engaged vertical to leverage. <u>Uncover how app preferences change by generation in data.ai</u>.

## **Average Gender Group Index Among Top Apps Per Category**

Index >100 Skews Towards Demographic Group



## Top Apps by MAU by Likelihood of Use

	Male		Female	
1		WhatsApp Messenger	f	Facebook
2	ebay	eBay		Facebook Messenger
3	<b>\rightarrow</b>	CommBank	O	Instagram
4	O	Microsoft Outlook		Spotify

**Source:** data.ai Note: 2021, Android phones; Average of Top 20 apps by MAU per category; Gender represented as Male and Female only and is not representative of all gender identities

### MACRO MOBILE TRENDS: DEMOGRAPHICS

## Market Differences Emerge by Gender Based on App Category

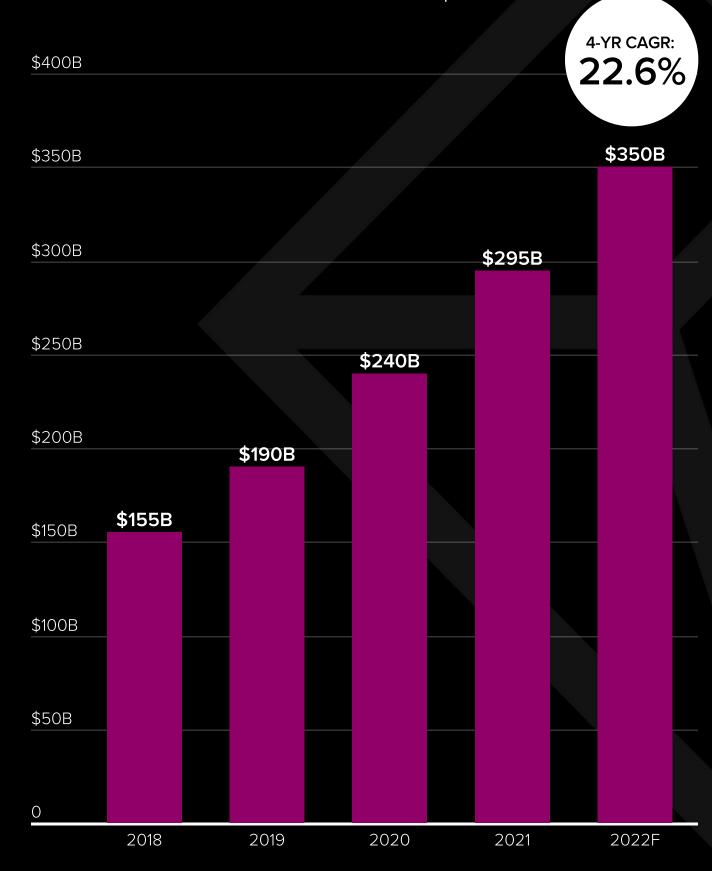
Sports apps overindex heavily with males in each market analyzed, whereas Food & Drink apps tend to skew more female. However, the difference can be subtle in the case of the US for Food & Drink and more dramatic in other markets like Japan.

We also see that the most used apps in each country tend to buck category. For instance, Shopping apps on the whole tend to skew more female overall, yet <u>Amazon</u> skews more male in Japan, the UK, Germany, France and Canada. Only in the US does <u>Amazon</u> skew more female.

Our analysis is limited to males and females only and is not representative of all gender identities.

Mobile demographic data gives you a benchmark for your industry and allows you to spot differences in your and your competitor's audience, which can be critical for user acquisition. <u>View demographics splits in data.ai.</u>

## Global Mobile Ad Spend



Source: data.ai

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 iOS App Store Keywords in 2021

**∀** Business 

✓ >

Rank	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Japan	Mexico	Russia	South Korea	Turkey	United Kingdom	United States
1	australia	google meet	job	boss 直聘	scanner	teams	whatsapp+	zoom	zoom	zoom	zoom	zoom	edevlet	scanner app	zoom
2	seek	zoom	zoom	企查 查	zoom	zoom	zoom	google meet	yahoo	meetings	почта россии	줌	türkiye	zoom	microsoft teams
3	australia post	meet	linkedin	天眼 查	teams	scanner app	google meet	meet	teams	meet	hh.ru	알바몬	zoom	teams	indeed
4	job	claro	indeed	腾讯 会议	linkedin	pdf scanner	whatsapp business	meetings	やぶー	google meet	зум	알바천 국	linkedin	scanner	teams
5	zoom	linkedin	teams	阿里 云	pôle emploi	scanner app kostenlos	call recorder for iphone free	pdf	やぶー	teams	сканер	한글	<b>i</b> şkur	microsoft teams	microsoft authenticator
6	linkedin	meetings	canada post	wps	camscanner	autoscout24	scanner	linkedin	やぶー	microsoft teams	леруа мерлен	알바	stream	scanner app free	duo mobile
7	jobs	teams	microsoft teams	企业 微信	indeed	microsoft teams	teams	pln	まいなぽいん とアプリ	pdf	мой налог	사람인	meetings	linkedin	linkedin
8	microsoft teams	vagas de emprego	chat	顺丰	whatsapp business	microsoft authenticator	linkedin	jobstreet	ずーむ	linkedin	лукойл	블라인 드	meet	indeed	google meet
9	xero	minha claro	google meet	今日 头条	pdf	linkedin	zoom meeting	scanner	zoom アプリ 無料	stream	teams	pdf	teams	cam scanner	the zoom app for iphone
10	teams	cpf	services	钉钉	ornikar	pdf	scanner for iphone	jne	zoom アプリ 無料	chat	сканер документов	스캔	pdf	uber driver	scanner 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



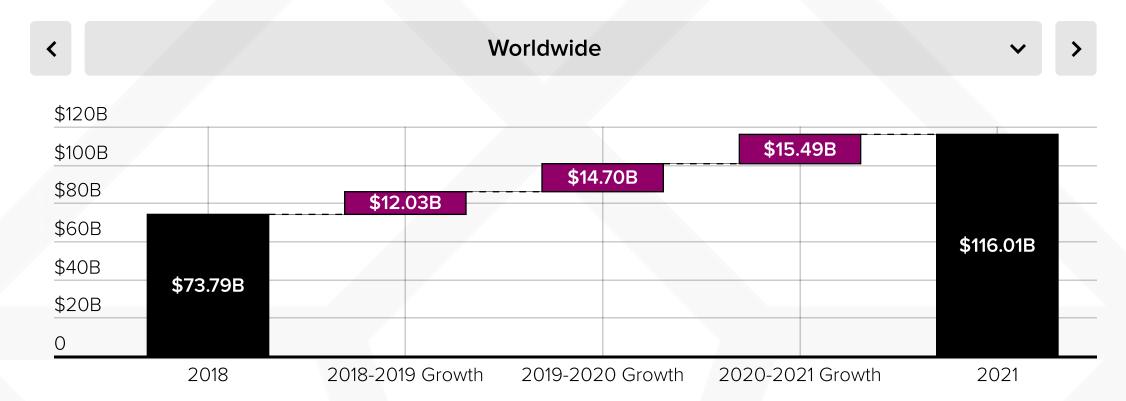
# Additional \$16 Billion in Gaming Consumer Spend was Added in 2021, Bringing Total to \$116 Billion

In 2021, hit games such as *Roblox* and *Genshin Impact* saw further growth in consumer spend 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.

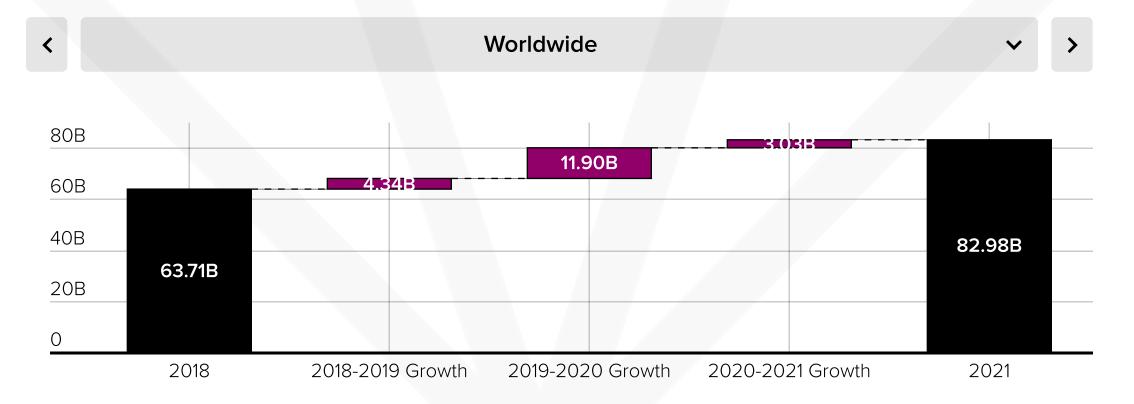
Hypercasual games like <u>Bridge Race</u> and <u>Hair Challenge</u> were key downloads driver, but 2021 saw some well known IPs such as <u>Pokémon UNITE</u>, and <u>PUBG: NEW STATE</u> making major gains in downloads and usage.

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

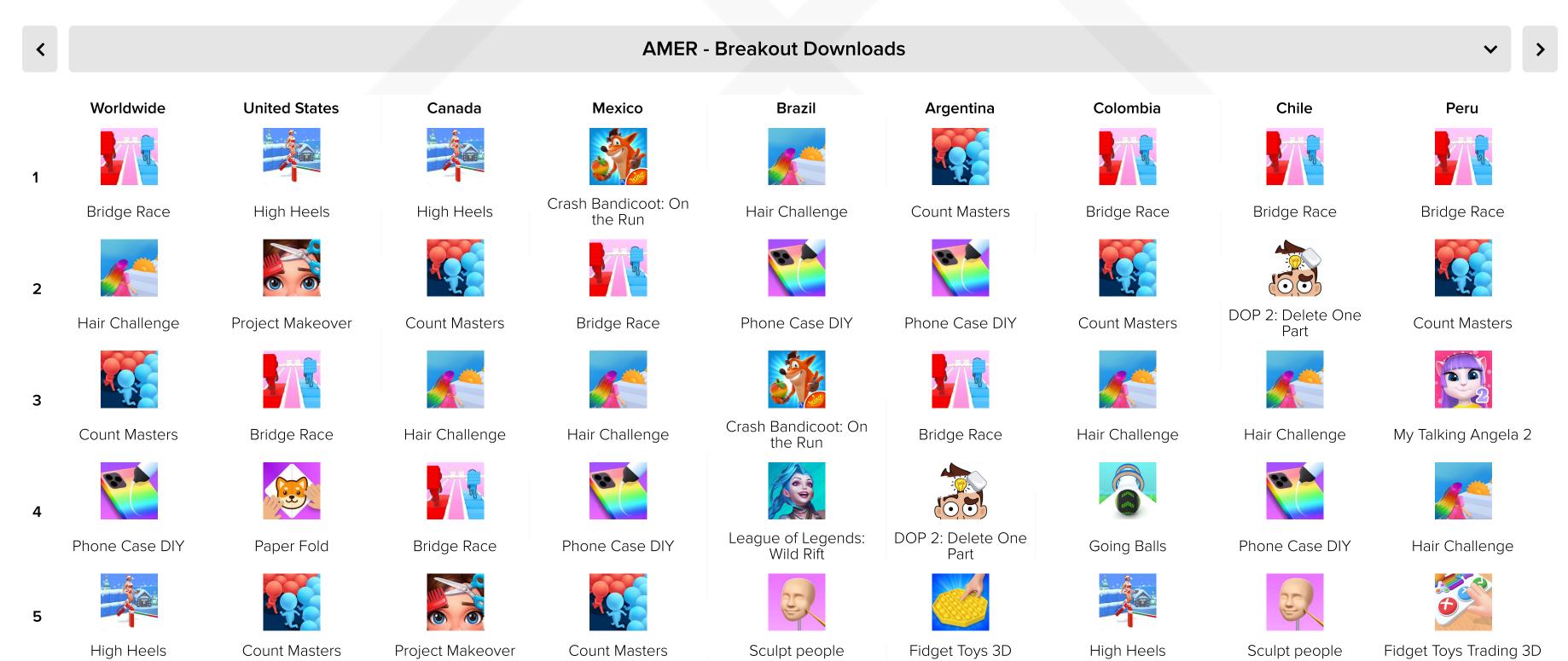


### **Mobile Game Downloads Growth**



**Source:** data.ai 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



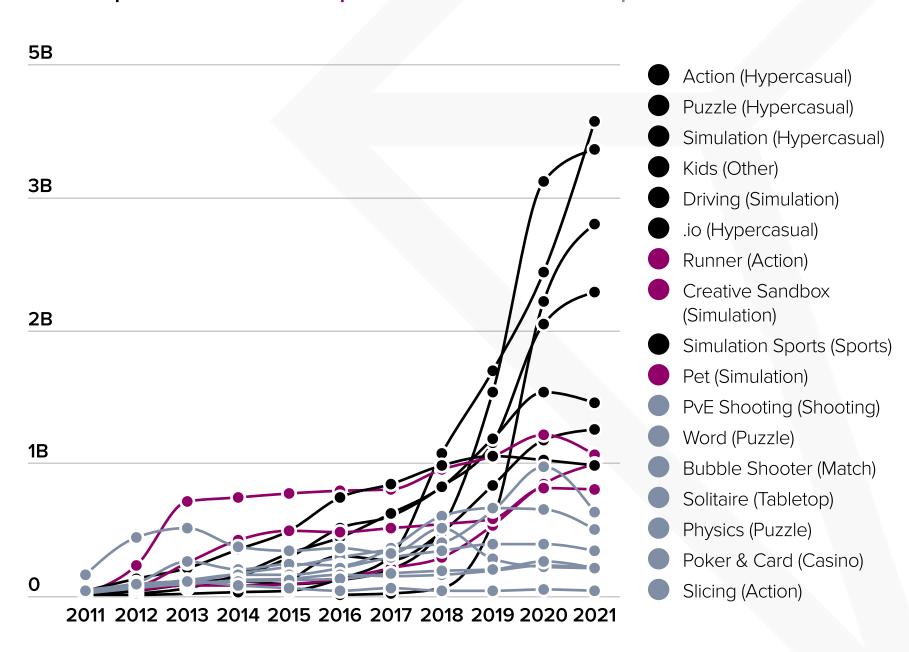
Learn More: Uncover the <u>Top Games by Change in Yearly Downloads</u>

**Source:** data.ai Note: Top Apps by year-over-year Downloads, Consumer Spend and Average Active User Growth across iOS, Google Play. MAU Growth on iPhones and Android Phones

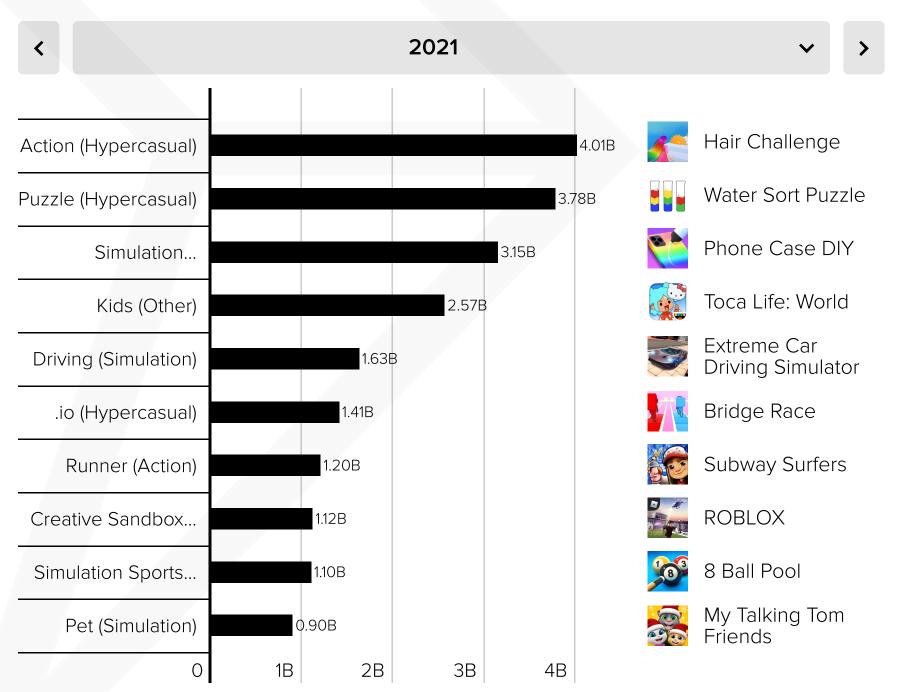
## Astronomical Rise of Hypercasual: Innovation & Shifting Player Preferences Gave Way to Emerging Game Genres

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

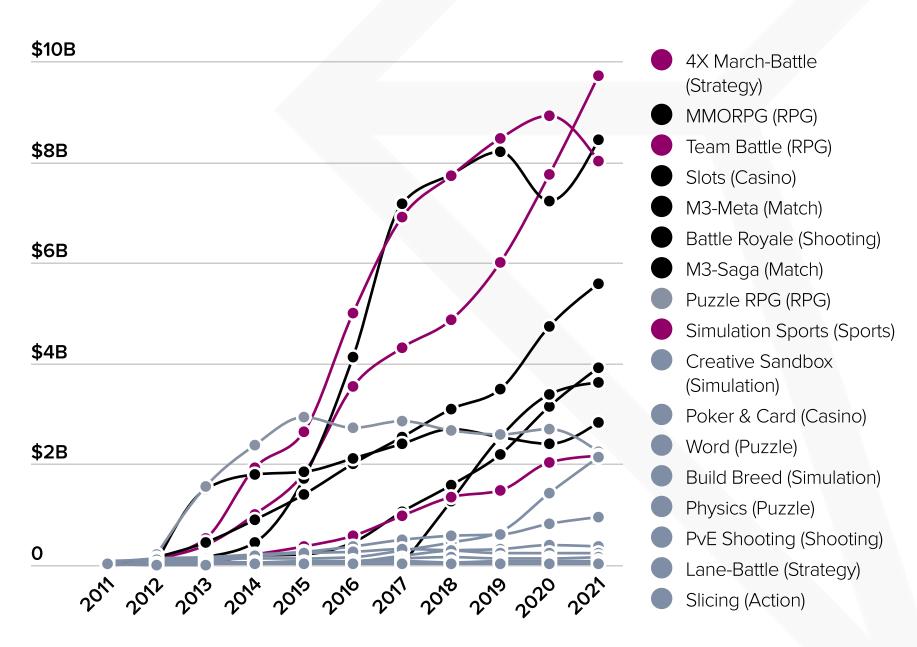


## Analyze More Genres in data.ai's Game IQ Market Sizing Report

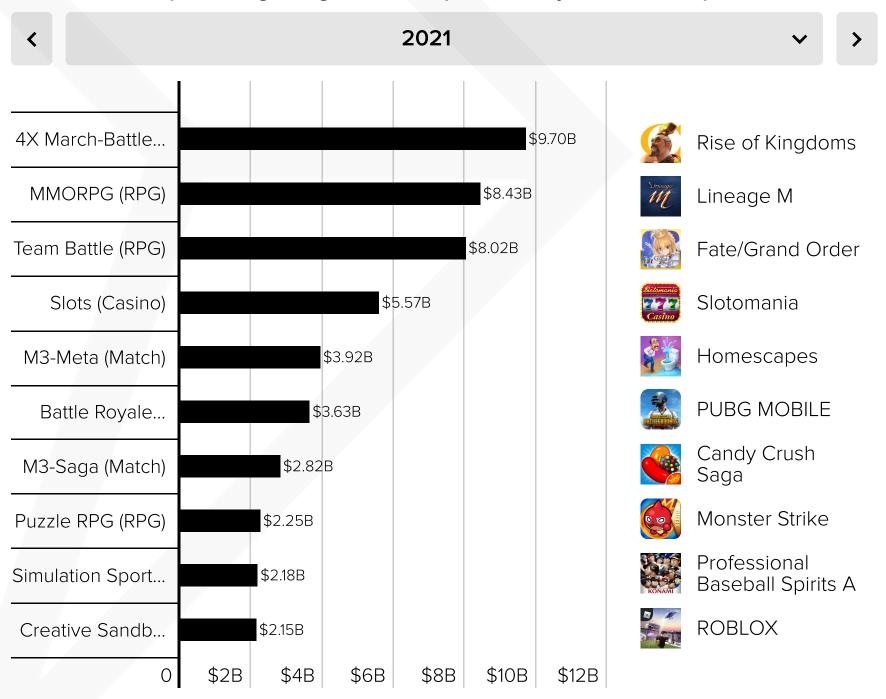
## 4x March-Battle Strategy Games Emerged as the Most Monetizable Genre for Mobile Games

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

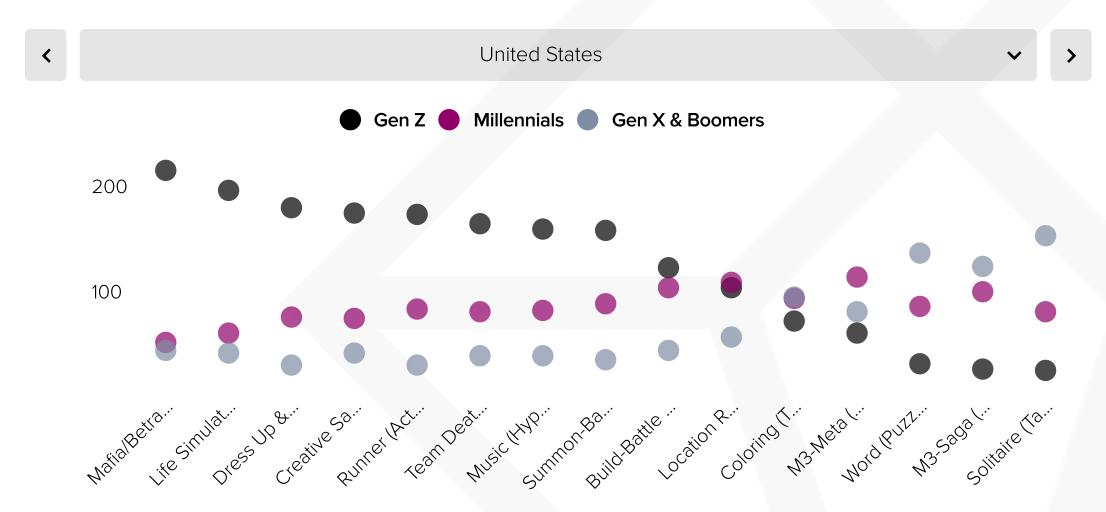


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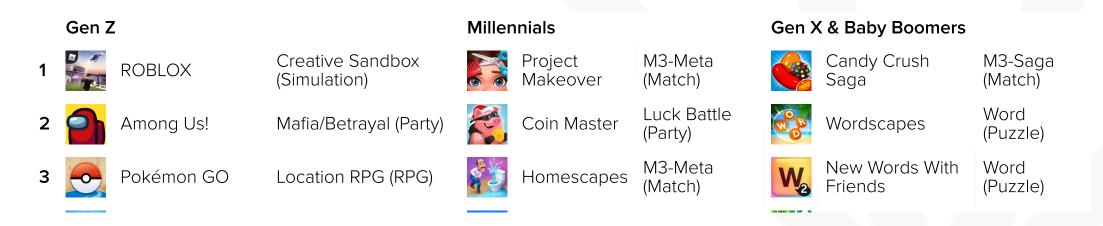
**Source:** data.ai Note: Downloads across iOS, Google Play. China is iOS only. Genre breakdown based on data.ai's Game IQ Taxonomy as of January 7th, 2022

### Average Age Group Index Among Select Subgenres

Index >100 Skews Towards Demographic Group



### Top Games by MAU Most Likely to Be Played by Age Group



Source: data.ai Note: 2021, iPhone and Android phones; Gen Z represented by those aged 16 -24; Millennials represented by those aged 25-44; Gen X / Baby Boomers represented by those aged 45+; Average of Demographics Index (a measure of demographic cohort compared to the overall population) among top 10 apps by average MAU per Genre.

### GAMING

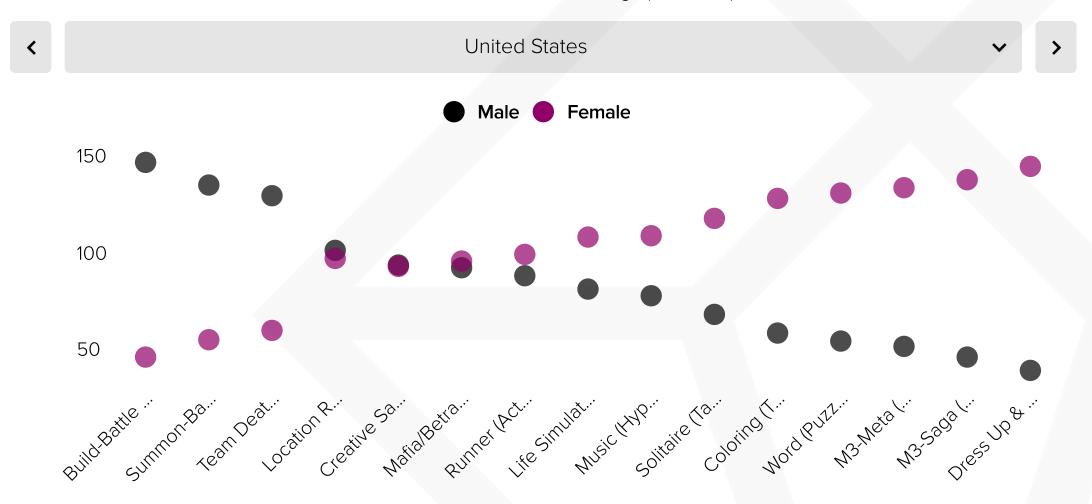
## Party, Simulation, Shooters & RPG Skew Towards Gen Z; Match 3 & Puzzle Preferred By Older Age Groups

Gen Z gamers in the markets analyzed are around 2.0x more likely to play Mafia/ Betrayal (Party) games such as <u>Among Us!</u>, while Gen X & Boomers in the US and UK are around 1.5x more likely to play Solitiare (Tabletop) games compared to the average population.

Understanding demographics segmentation can help you build out marketing campaigns and partnerships for games with demographics that match your target audience. View the most used games by age group in data.ai over time, by device and in different markets.

### **Average Gender Group Index Among Select Subgenres**

Index >100 Skews Towards Demographic Group



## Top Games by MAU Most Likely to Be Played by Gender Group

	Male		Female						
1	Pokémon GO	Location RPG (RPG)	ROBLOX	Creative Sandbox (Simulation)					
2	Call of Duty: Mok	oile Team Deathmatch (Shooting)	Among Us!	Mafia/Betrayal (Party)					
3	Clash Royale	Summon-Battle (Strategy)	Candy Crush Saga	M3-Saga (Match)					

**Source:** data.ai Note: 2021, iPhone and Android phones; Average of Demographics Index (a measure of demographic cohort compared to the overall population) among top 10 apps by average MAU per Genre

### GAMING

# Match 3 Games Tend to Skew Towards Female Audience, While Build-Battle Games Skew Male

In the US, France and Japan, female gamers are around 1.3x more likely to use M3-Saga (Match) games, and male gamers in the US are 1.5x more likely to play Build-Battle (Strategy) games than the general population.

Not only are <u>Among Us!</u> and <u>ROBLOX</u> clear favorites among Gen Z, they also have higher tendency to be played by female audiences. <u>Pokémon GO</u> has enjoyed widespread popularity globally, but tends to skew towards a male audience.

data.ai's audience index can further show you where the specific demographic group is engaging on mobile. Dive Deeper into Genre Demographics in the <u>Genre Summary Report.</u>

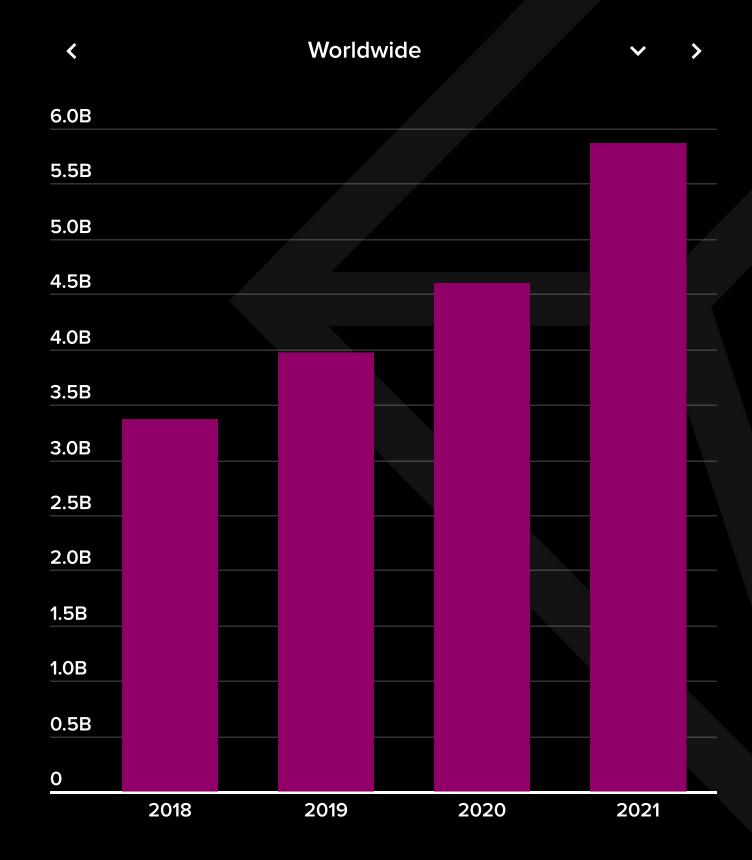
## Finance

Consumers have shown how much they love the convenience and control of our all-in-one shopping app. From shopping inspiration and payment methods to transparent banking, budgeting features and post-purchase services, the Klarna app helps consumers to save time and money at every step of the shopping journey. With 70% of mobile shoppers looking for a single app that better unites services and features instead of switching between apps, Klarna is optimally positioned to become the world's favorite way to shop, pay and bank.

David Sandström
Chief Marketing Officer
Klarna



## Finance App Downloads by Country



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

### FINANCE

## Finance App Downloads in India Surpassed 1B in 2021, Fueling the 28% YoY Increase in Finance App Downloads Worldwide to 5.9B

Although not the largest markets globally, Mexico, Indonesia, Argentina, and Brazil saw the largest growth over the past 4 years, up 250%, 185%, 180% and 175%, respectively.

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

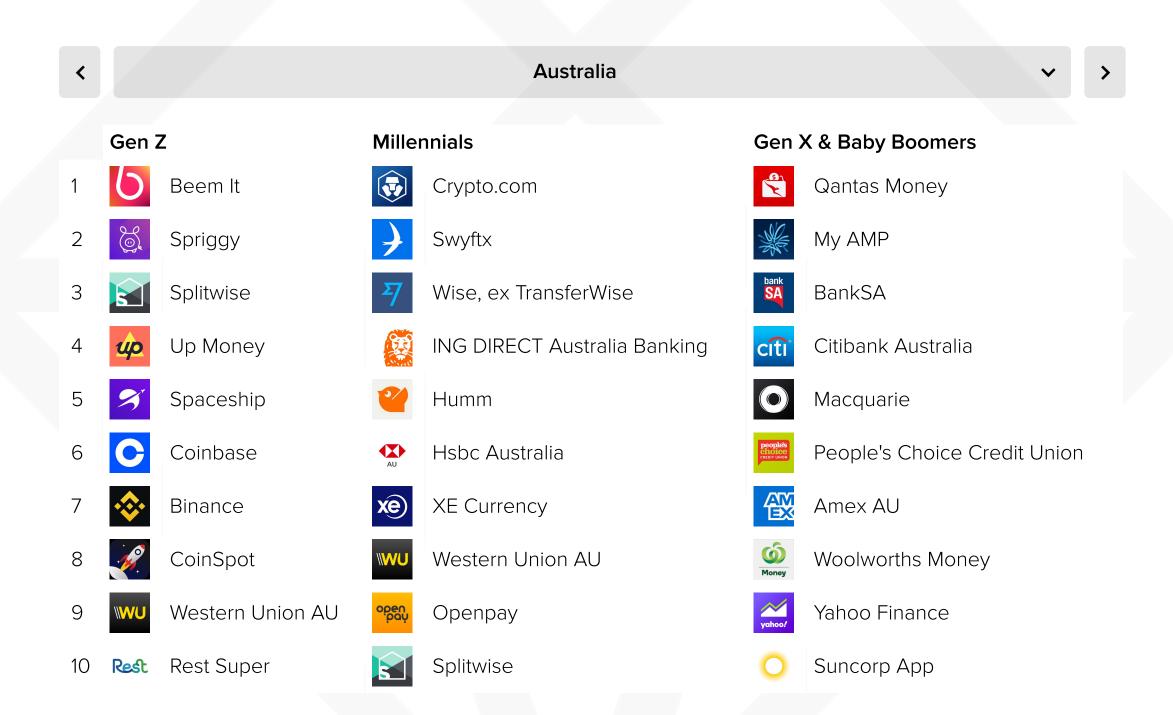
## Embracing Innovation: Gen Z Are Most Likely to Use Neobanks and Cryptocurrency Trading Apps

Although retail banks are widely used by Gen X and Baby Boomers, Gen Z are most likely to use trading apps and neobanks across regions. In addition, they also prefer to use money transfer apps such as <u>Venmo</u>, <u>Cash App</u>, and <u>Splitwise</u> as they are increasingly comfortable using their mobile phones as a form of payment instead of cash.

Finance app publishers who wish to reach the next generation of mobile-savvy users should keep in mind what they now come to expect: fast and simple money movement and financial flexibility that tailors to their needs.

Compare the top finance apps by active users across countries in data.ai.

## Top Finance Apps by MAU by Likelihood of Use



**Source: data.ai** Note: 2021, iPhones and Android phones; Top 10 Finance apps used per age group indexed among the Top 50 apps overall by MAU in the Finance category; Gen Z represented by those aged 16 -24; Millennials represented by those aged 25-44; Gen X and Baby Boomers represented by those aged 45+

### **FINANCE**

## Neobanks Gain in Popularity as YONO SBI, Nubank, and PicPay Each Saw >30% YoY Increase in Average MAU Worldwide

Most countries tend to use homegrown neobanks; 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 Worldwide 55M 50M 45M 40M 35M 30M 25M 20M 15M 10M 13,635,000 40,843,000 27,305,000 19,602,000 22,738,000 18,936,000 37,782,000 14,765,000 YONO SBI **PicPay** Yono Lite SBI Nubank Revolut 2020 Source: data.ai 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.

FINANCE

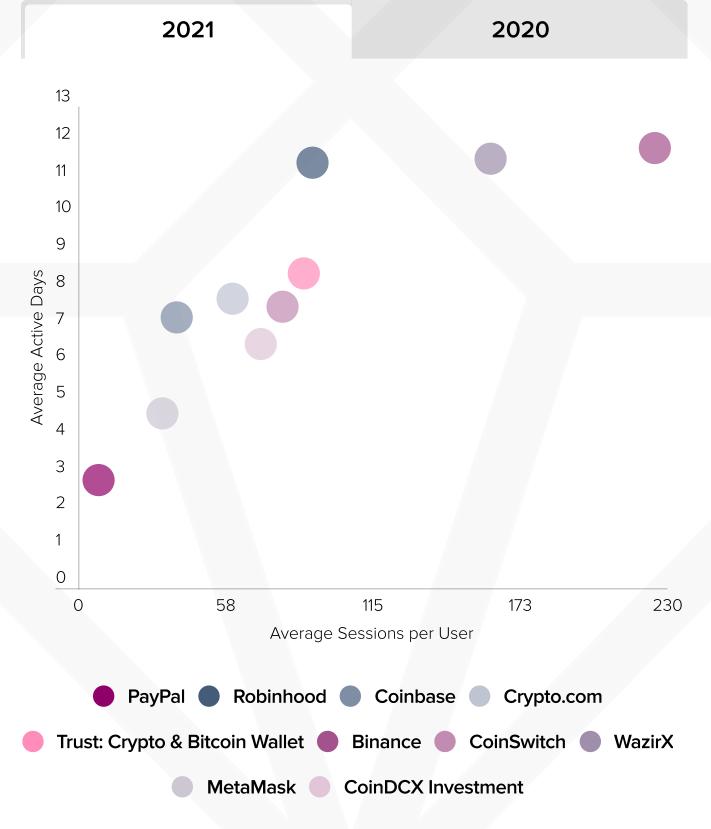
## PayPal Entered the Cryptocurrency Market in 2021; Binance & WazirX Saw the Highest YoY Increase in Sessions Per User Worldwide

Although US-HQ'd publishers dominates the cryptocurrency space, taking up half of the top 10 most downloaded cryptocurrency apps worldwide, India was a rising contender in 2021.

<u>CoinDCX Investment</u> made a splash despite only launching in Q4 2020 across iOS and Google Play stores. Within one year, it has reached #9 worldwide in terms of the most downloaded cryptocurrency apps.

Although <u>PayPal</u> had the highest average MAU worldwide, <u>Trust:</u> <u>Crypto & Bitcoin Wallet</u>, <u>Binance</u>, and <u>WazirX</u> saw the highest increase in usage YoY; understanding the flexibility of their offerings that go beyond trading cryptocurrency assets is crucial for any app publisher that tries to emulate their successful adoption worldwide. <u>Compare the top breakout cryptocurrency apps of 2021.</u>

## Monthly Engagement Among the Top 10 Cryptocurrency Apps by Worldwide Downloads in 2021

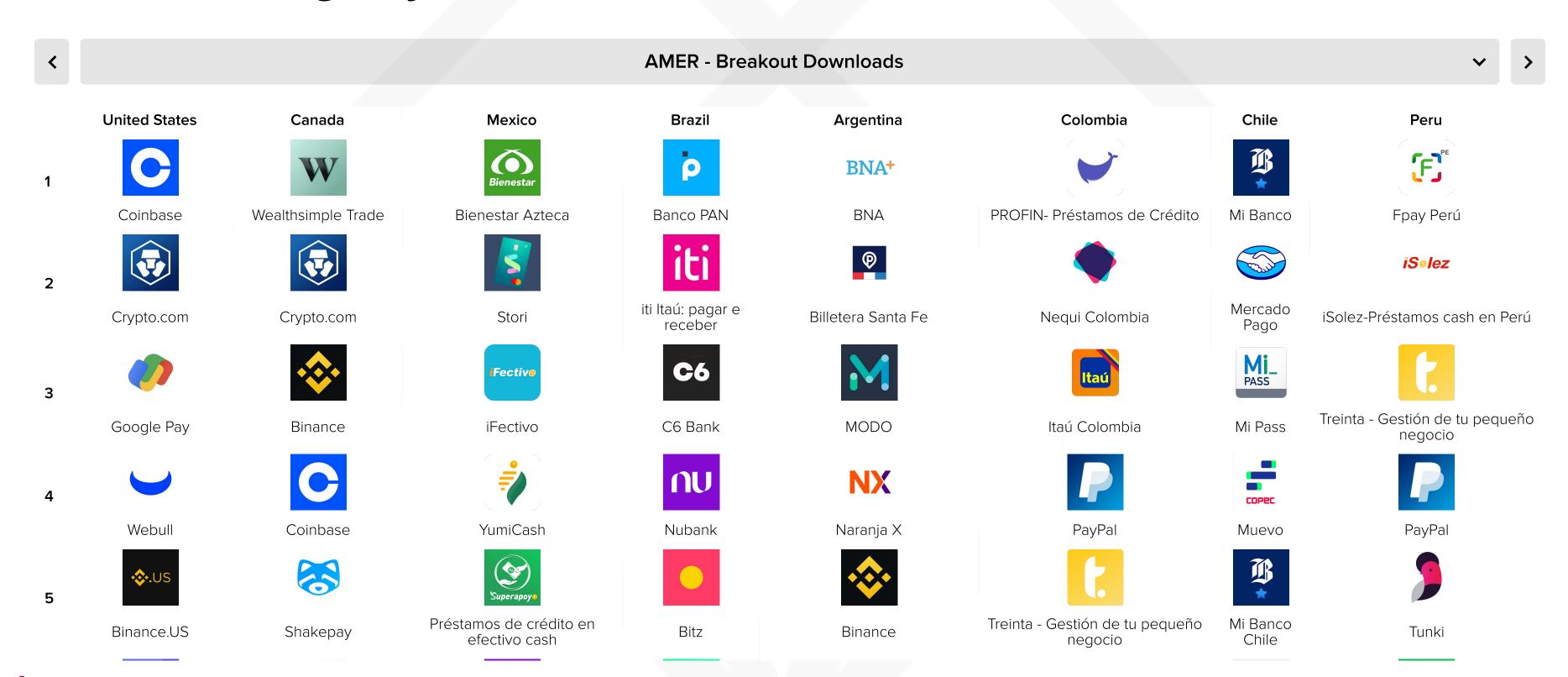


Source: data.ai Note: Downloads across iOS, Google Play; usage data on Android only. Average Sessions per User represents the average number of sessions per active user in a given month throughout 2021. Average Active Days represents the average days of use across all active users in a given month throughout 2021.

CoinDCX Investment was launched in Q4 2020 across iOS

and Google Play Stores.

## 2021 Rankings by Market | Finance



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

**Source:** data.ai 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

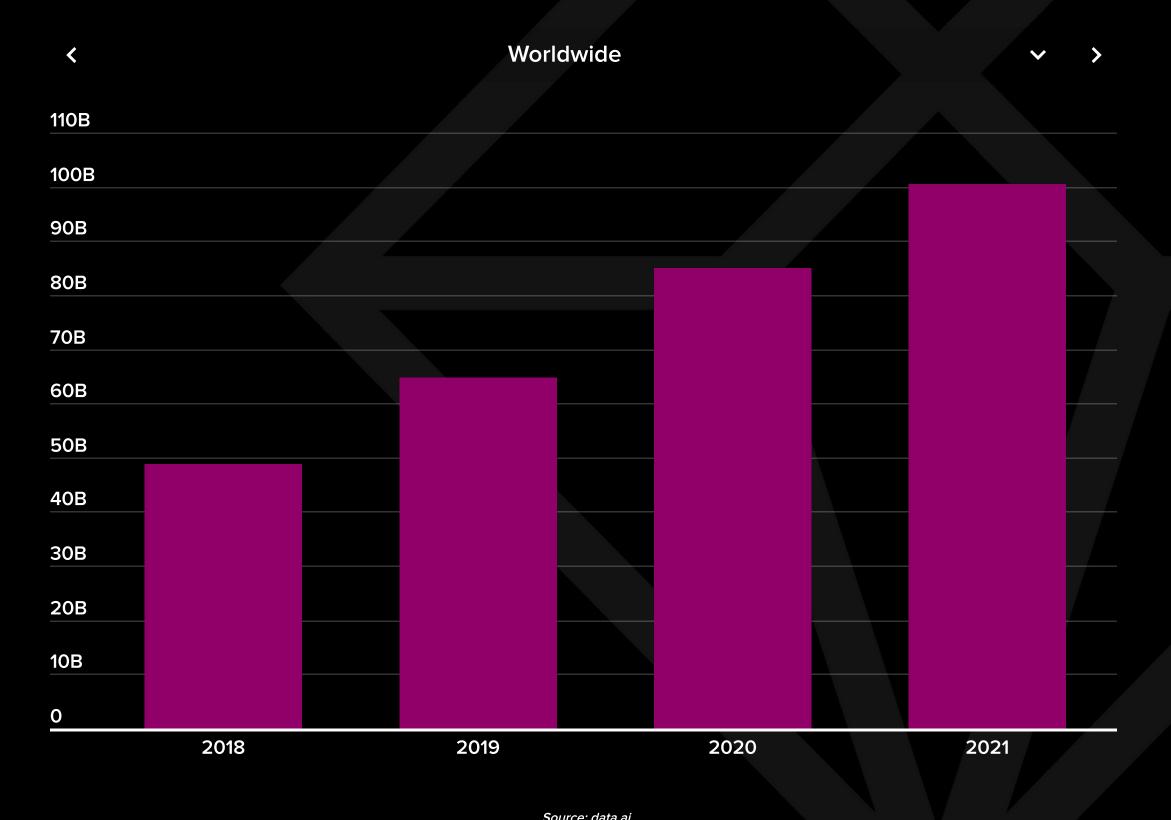
## Retail

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

asos

## Annual Hours Spent in Shopping Apps



RETAIL

## Time in Shopping Apps Reached Over 100 Billion Hours Spent Globally

Time spent in Shopping apps rose 18% year-over-year, 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 the US, however, the mobile shopping market continued to be dominated by US-based brands (66% share), with only 34% from non-domestic brands.

Still, 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.

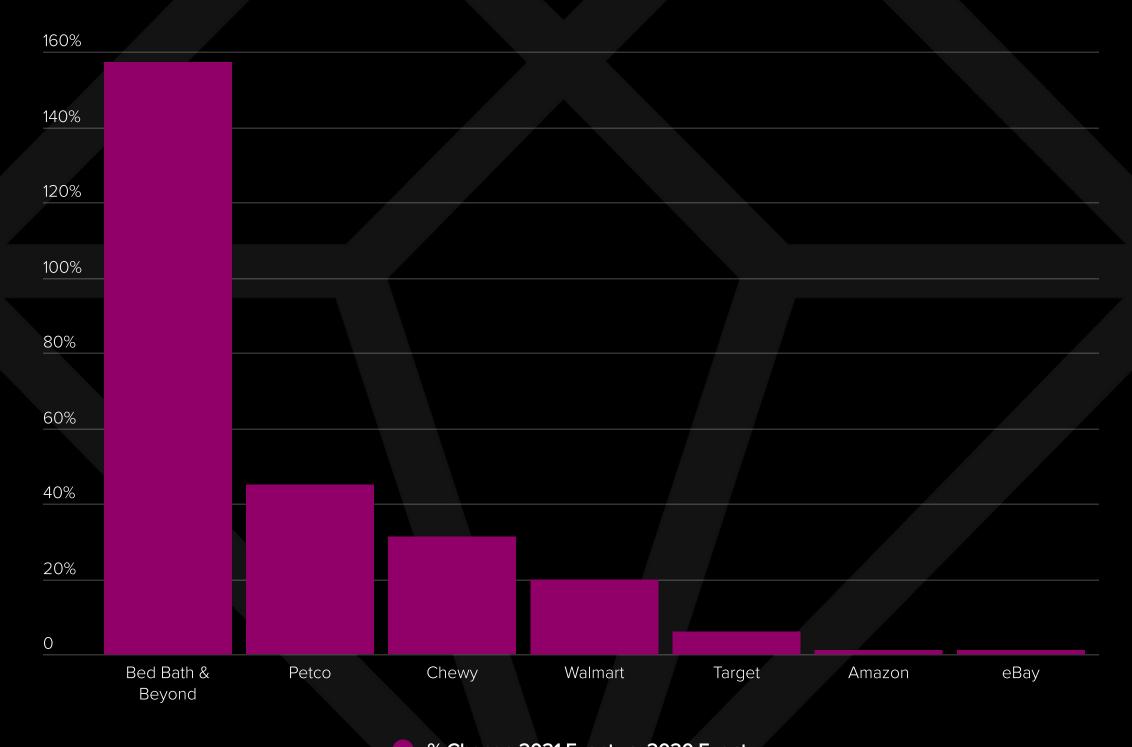
Retail brands are losing share to non-local companies, most notably in regions across AMER as shoppers turn to overseas-HQ'd Shopping apps. Evaluate which of the top companies are driving shifts in market share.

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



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

## Growth in Sessions Spent in Shopping Apps in the US During "Prime Day" Deal Period



% Change 2021 Event vs. 2020 Event

**Source:** data.ai Note: Android Phones. Among select retailers that held a "Prime Day competitive savings event" in 2021. Data reflects the 2-day event period only, based on Amazon's official Prime Day event dates (6/21-6/22 in 2021 and 10/13-10/14 in 2020)

### RETAIL

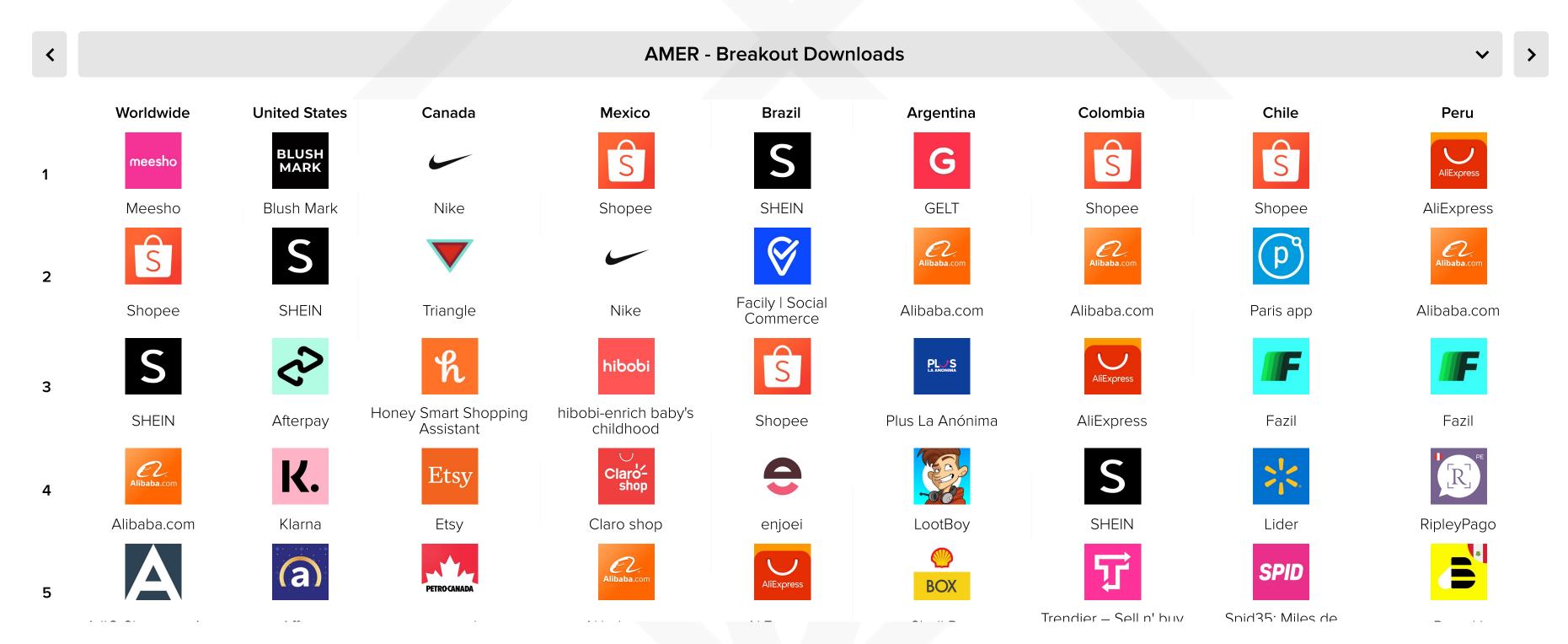
## Competing "Amazon Prime Day" Events Spurred Sessions Growth by 20% for Walmart & Smaller Savvy Players

While Prime Day was started by <u>Amazon</u>, nearly all major retailers piggyback with rival events as they compete for share of wallet. This year, Amazon held <u>Prime Day 2021</u> in <u>June</u> (6/21 - 6/22) vs the October event period that was held last year, and competitive retailers followed suit.

<u>Walmart</u> held their first "Prime Day" event in 2020 called the "Big Save Event", which ran parallel to Amazon Prime Day's <u>10/13 - 10/14 event</u>. Because of its success, <u>Walmart</u> ran "Deals for Days" in 2021 alongside Prime Day and saw 20% more sessions than the year before. Similarly, <u>Target</u> announced Target Deal Days, and <u>Chewy</u> hosted their Blue Box Event sale.

Dive into our <u>creative data to see how other players</u> <u>promote on mobile</u> surrounding high traffic retail holidays.

## 2021 Rankings by Market | Shopping

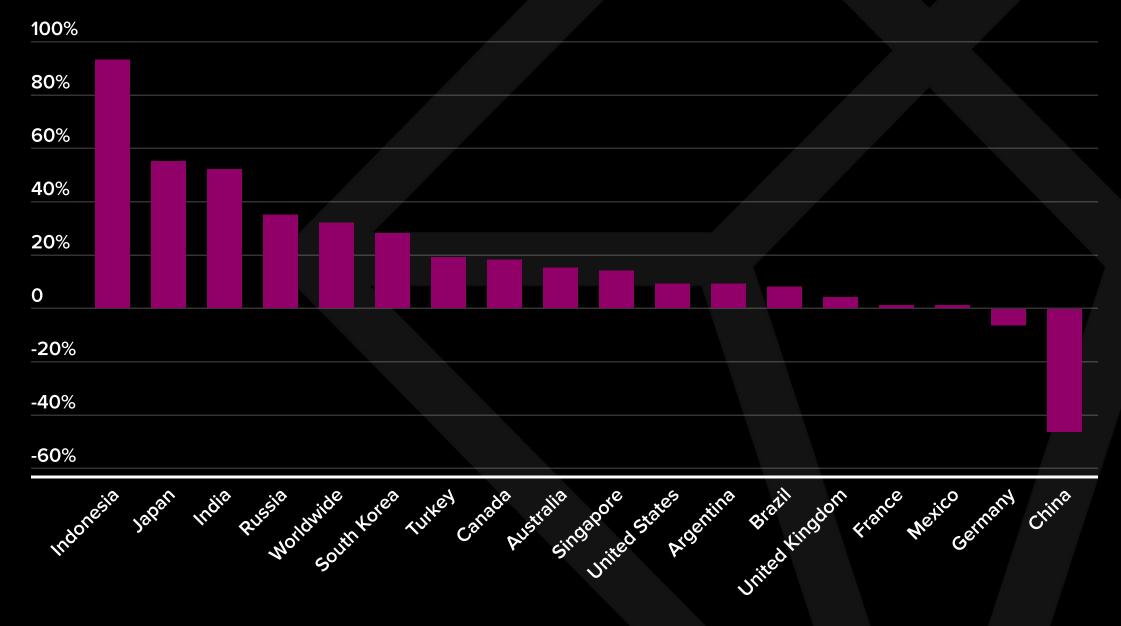


## Learn More: Uncover the <u>Top Shopping Apps by Change in Yearly Downloads</u>

**Source:** data.ai. 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

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 32% Worldwide 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.

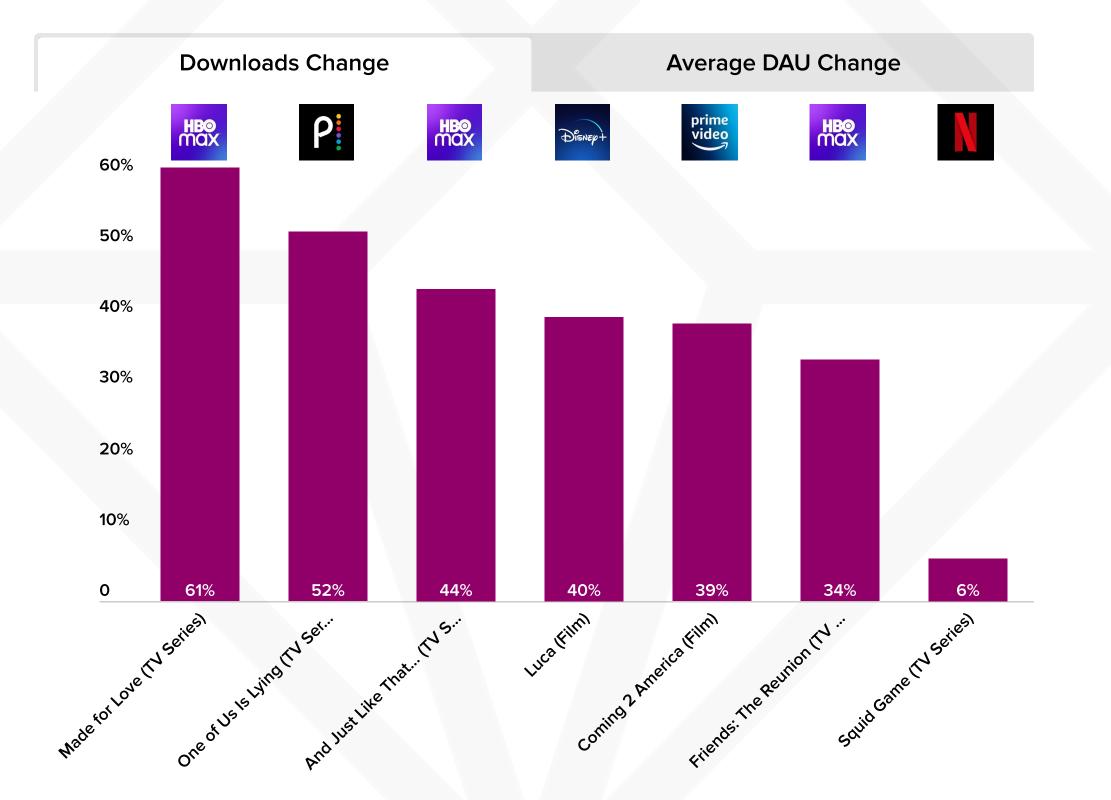
# Exclusive Content Releases Drive Spikes in Video Streaming App Downloads Amidst Increased Competition in 2021

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 <u>Netflix</u> 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

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**

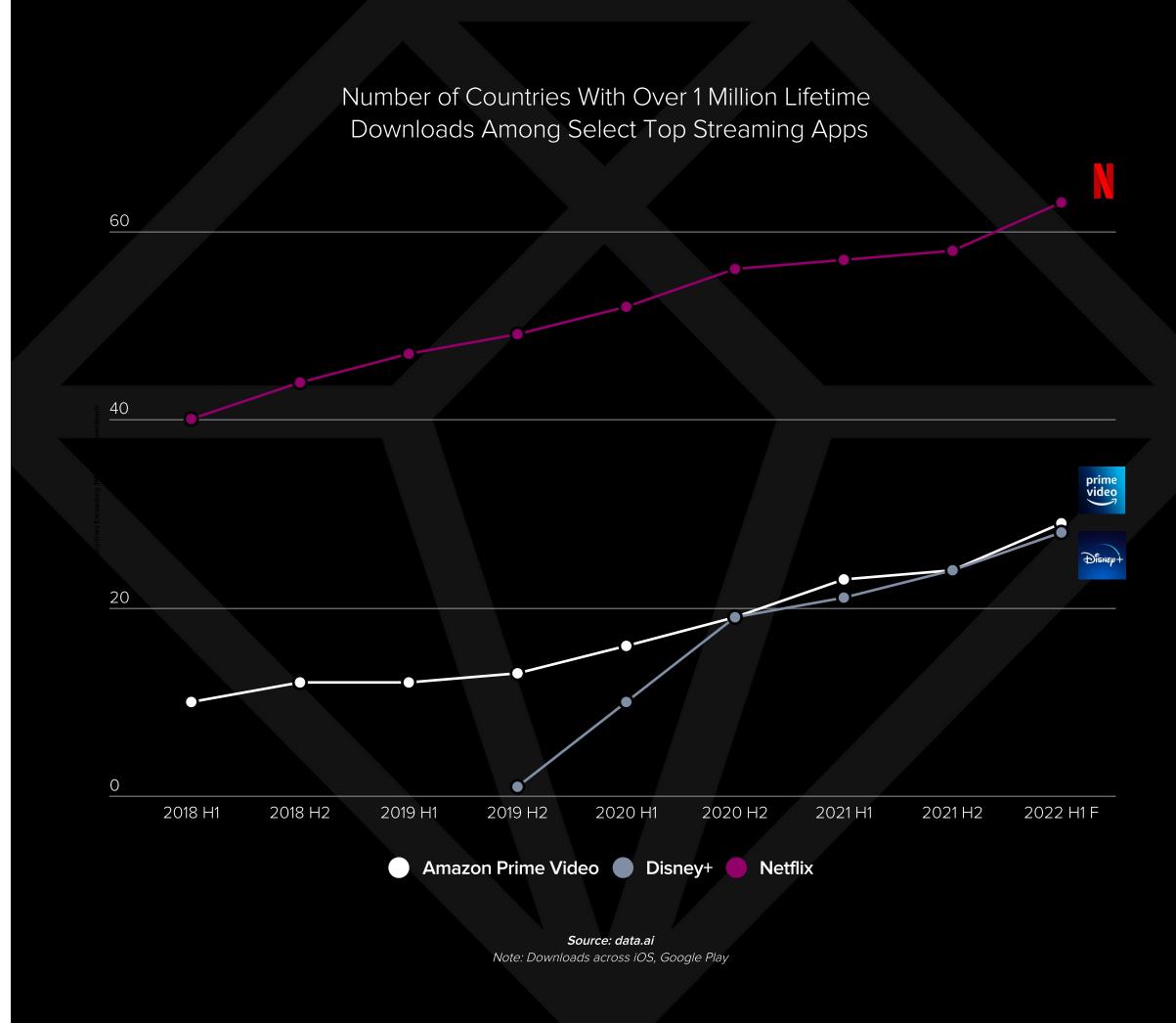
## Global Expansion Heats Up: Netflix Set to Surpass 1 Million Downloads in Over 60 Countries in 2022

<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.

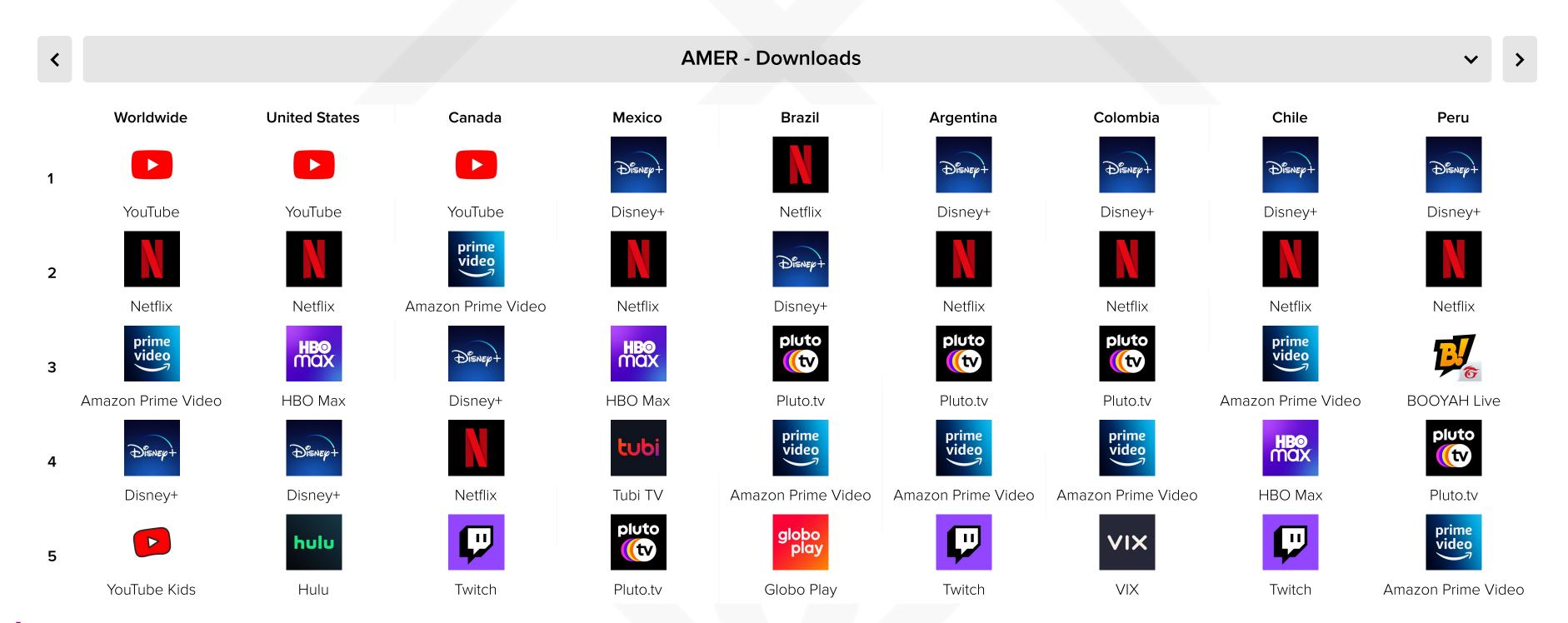
<u>Disney+</u> rivals <u>Amazon Prime Video's</u> global footprint, despite launching 7 years later on mobile.

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 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

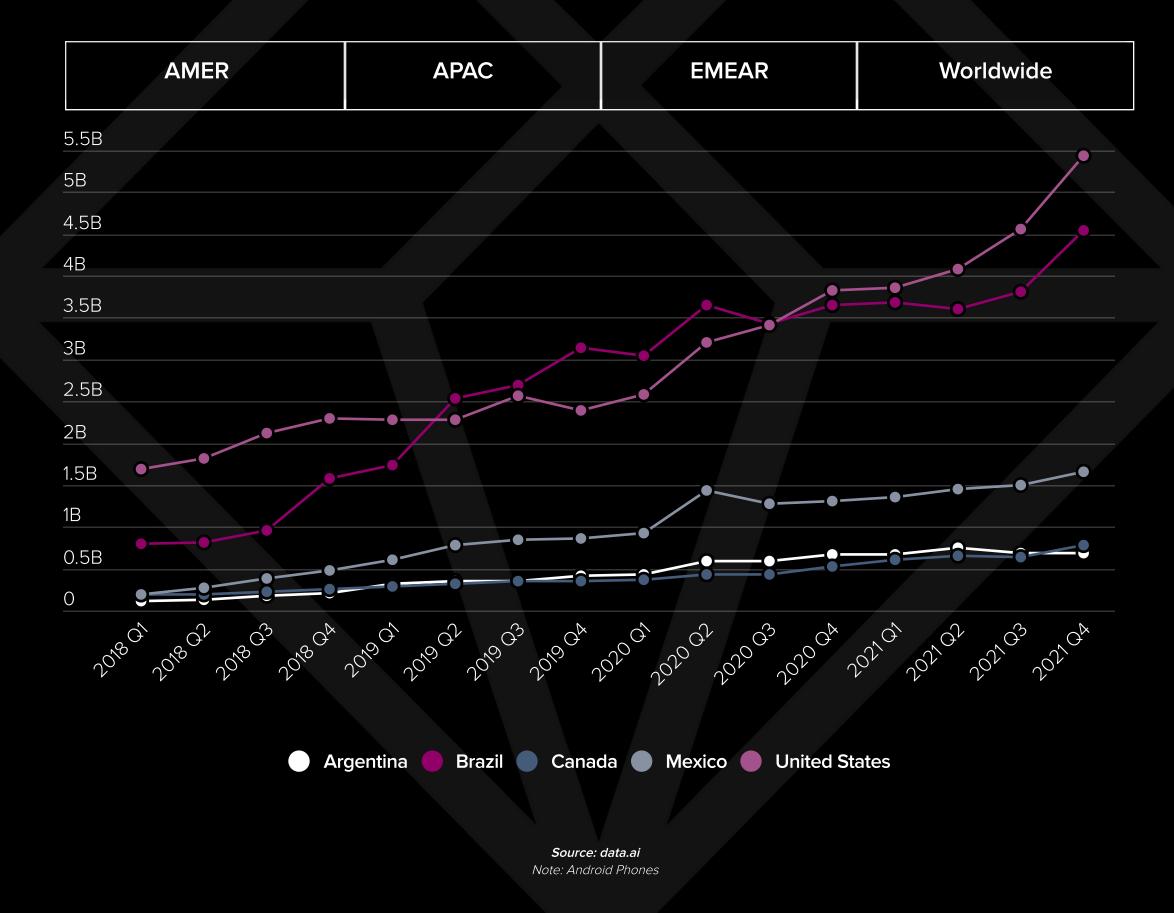
The pandemic expedited usage of Food & Drink apps across the world. Despite concerns for a slowdown following regional re-openings, an increase in both supply and in demand pushed market growth further than ever. Globally, users spent 49% more sessions YoY in 2021 in Food & Drink apps.

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, 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, quickfulfilment, 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

Brazil

burger king
comida restaurantes

mcdonalds food delivery subway

**FOOD DELIVERY** 

**QSR & FAST-CASUAL** 

**GENERIC KEYWORDS** 

DISCOVERY / REWARDS / RECIPES

**Source:** data.ai 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 established markets such as the US, UK, and France, branded food delivery keywords ranked among the top terms, followed by QSR brand names. 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>

# A Recent Acquisitions Drive Rapid Growth for 10-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>.

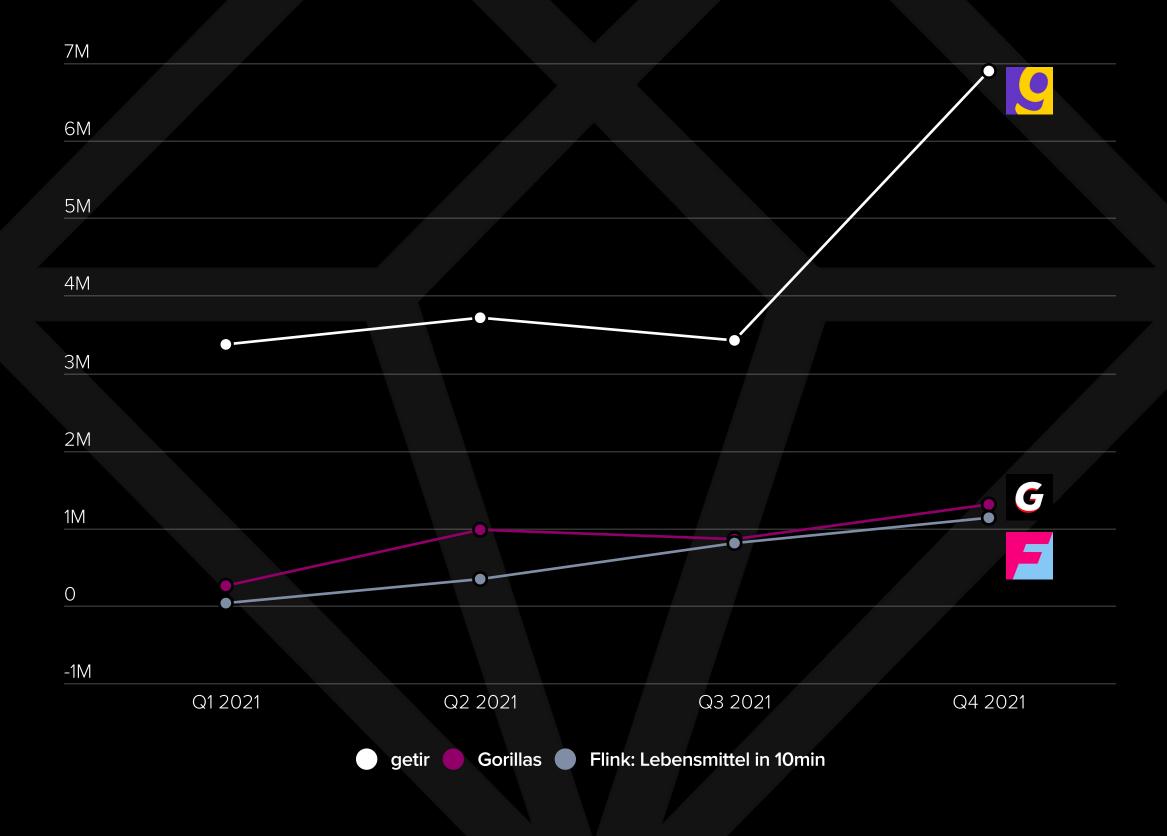
DE-based *Gorillas* and *Flink* are among several rapidly growing players both reaching over 1 million global downloads in Q4.

Dive into emerging trends and players even further.

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

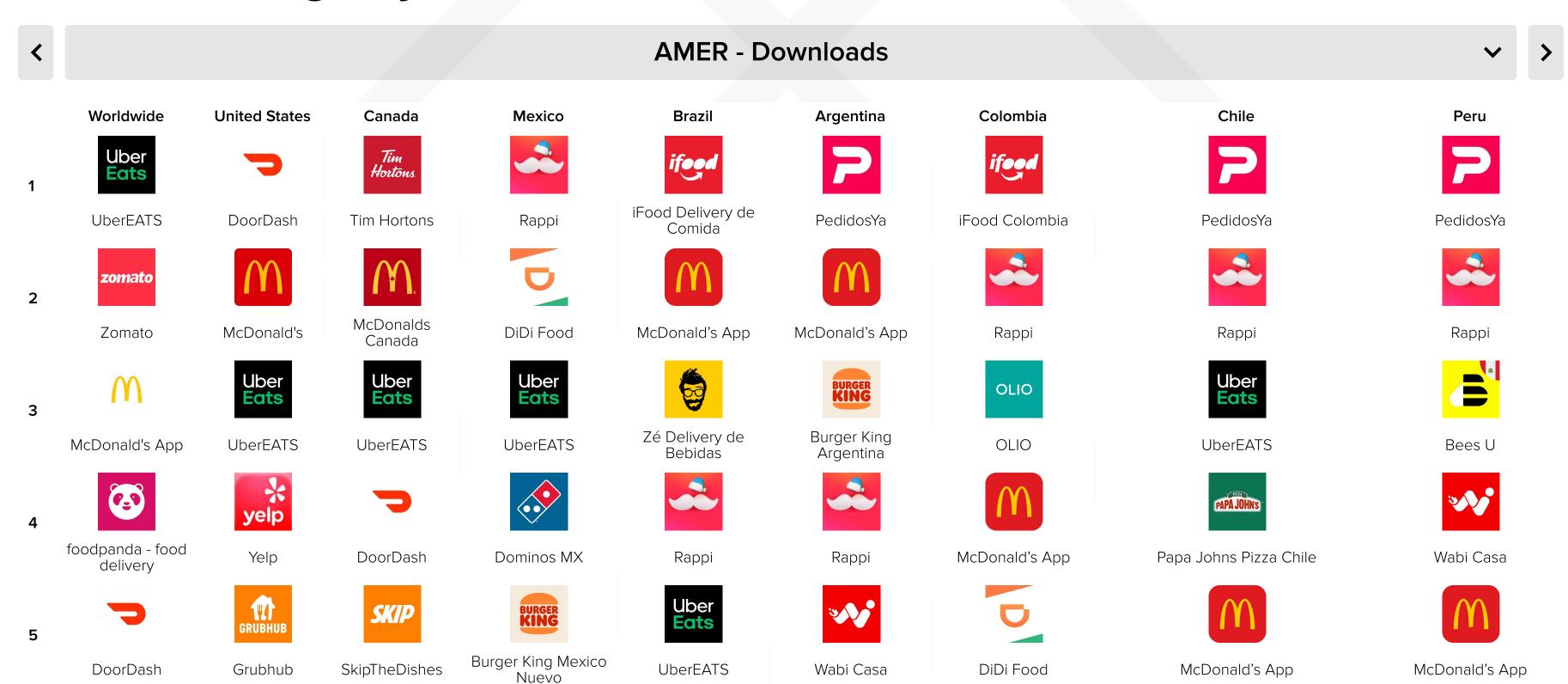
<u>competitors</u> driving global growth within rapid delivery.





**Source:** data.ai 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 Top Food & Drink Apps by Yearly Downloads

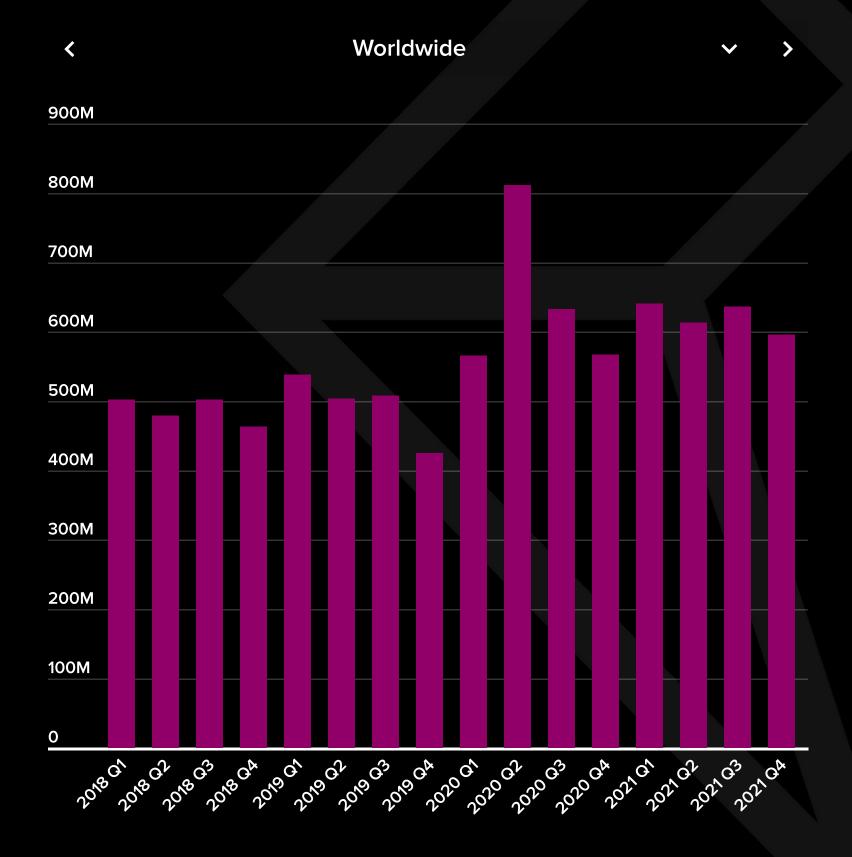
# Health & Fitness

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

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

#### HEALTH & FITNESS

# Global Health & Fitness App Downloads Surpassed 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</u> market shifts in data.ai.

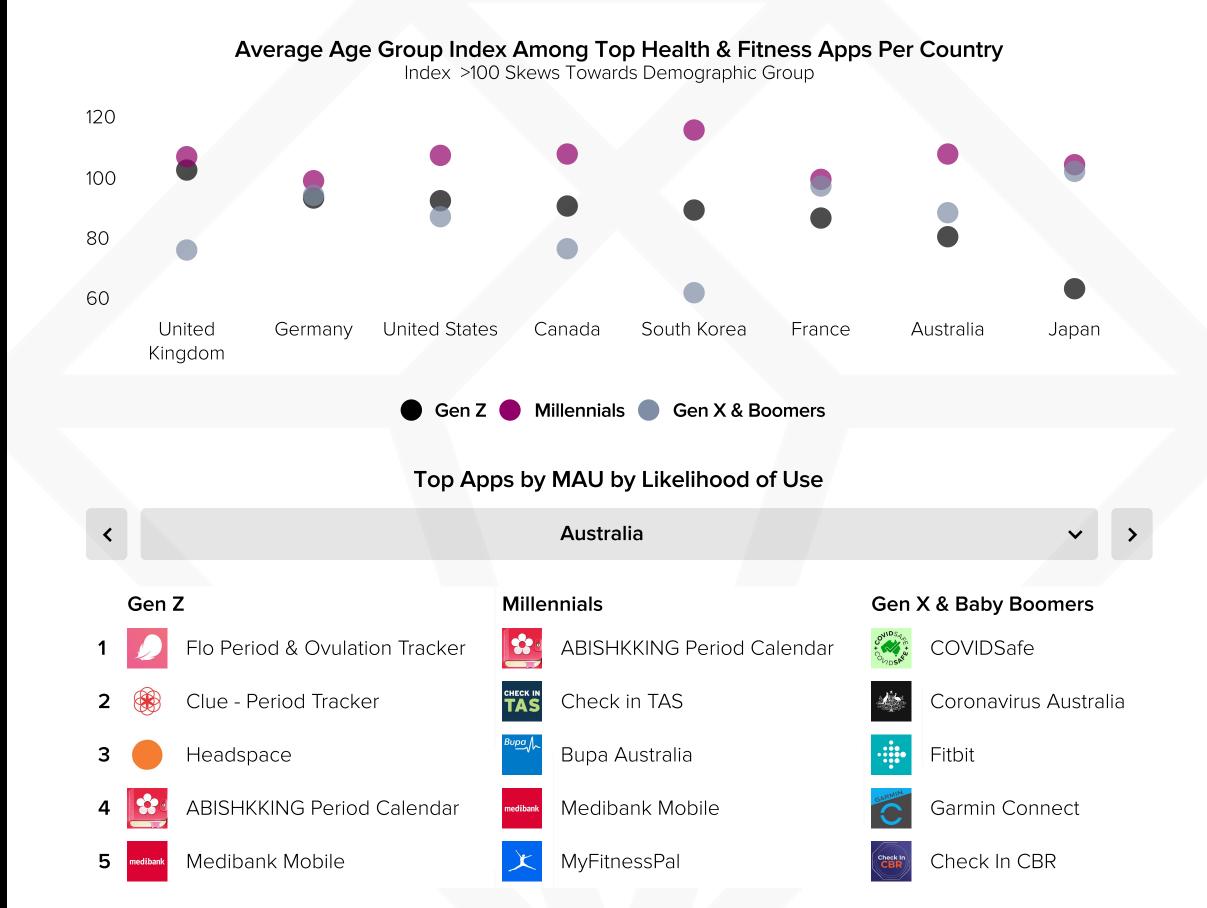
#### **HEALTH & FITNESS**

# Walking & Fitness Apps are Most Popular Among Older Groups, While Meditation Apps More Likely Used Among Gen Z

The most differences in generational use of Health & Fitness apps emerged in South Korea, with the least in Germany.

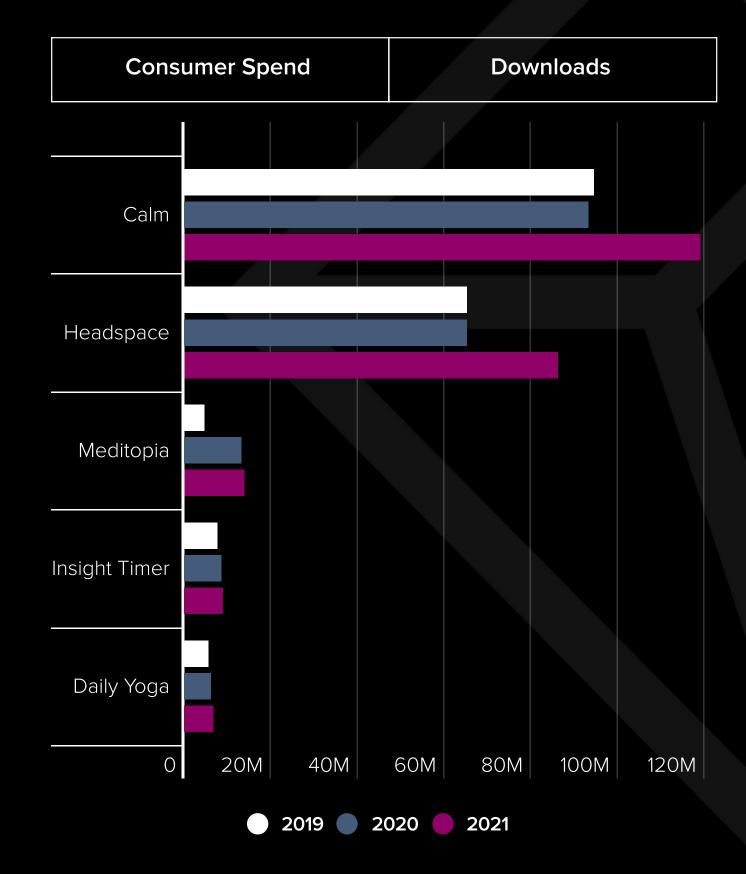
Gen Z users of Health & Fitness apps tend to be more comfortable using apps that center around knowledge empowerment and privacy, such as feminine health apps; they are also more willing to try mental-health focused apps such as *Headspace*.

This contrasts with Gen X & Baby Boomers, where pedometer, walking and hiking apps tend to be more popular. Compare demographics data across age groups.



**Source:** data.ai Note: 2021, Android phones; Average of Top 20 apps by MAU within the Health & Fitness category; Gen Z represented by those aged 16 -24; Millennials represented by those aged 25-44; Gen X and Baby Boomers represented by those aged 45+

### Consumer Spend & Downloads Among Top Most Downloaded Meditation Apps Worldwide



#### Source: data.ai

Note: Consumer Spend and Downloads across iOS, Google Play

#### **HEALTH & FITNESS**

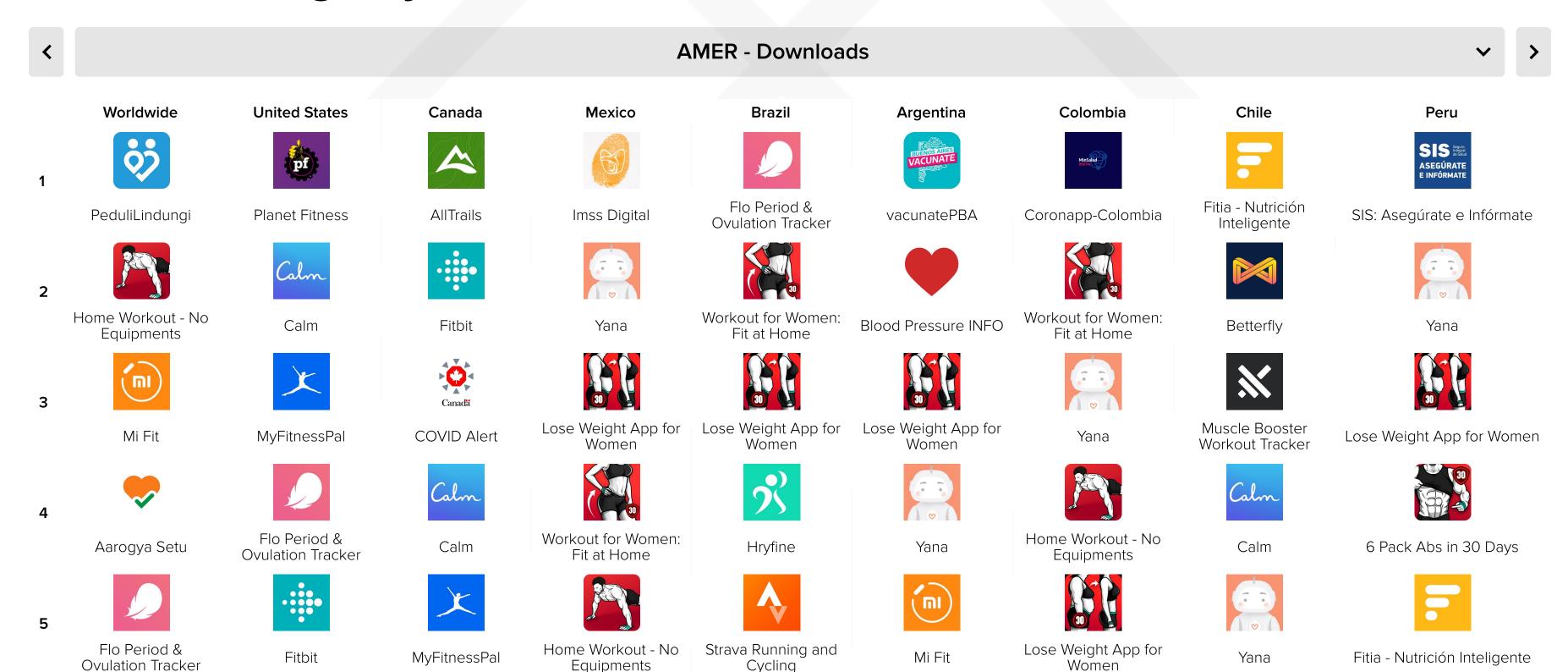
# The Top 5 Downloaded Meditation Apps Saw 25% Growth YoY in Consumer Spend Following Record Downloads in 2020

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

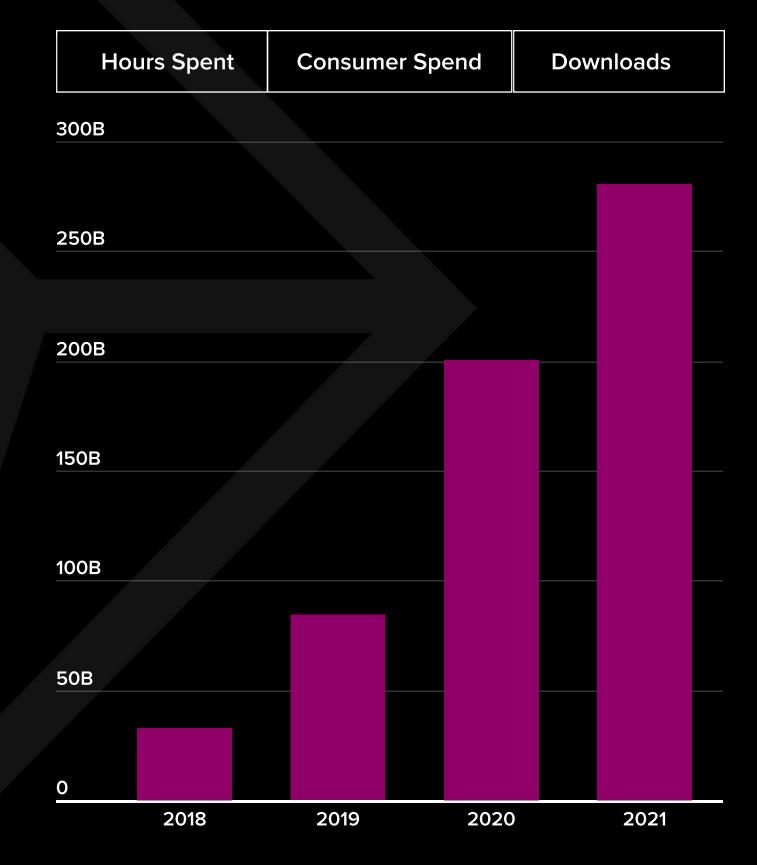
# All Eyes on Live Streaming: Time Spent Grew 9x in 4 Years — Cultivating the Deepest Social Engagement

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.

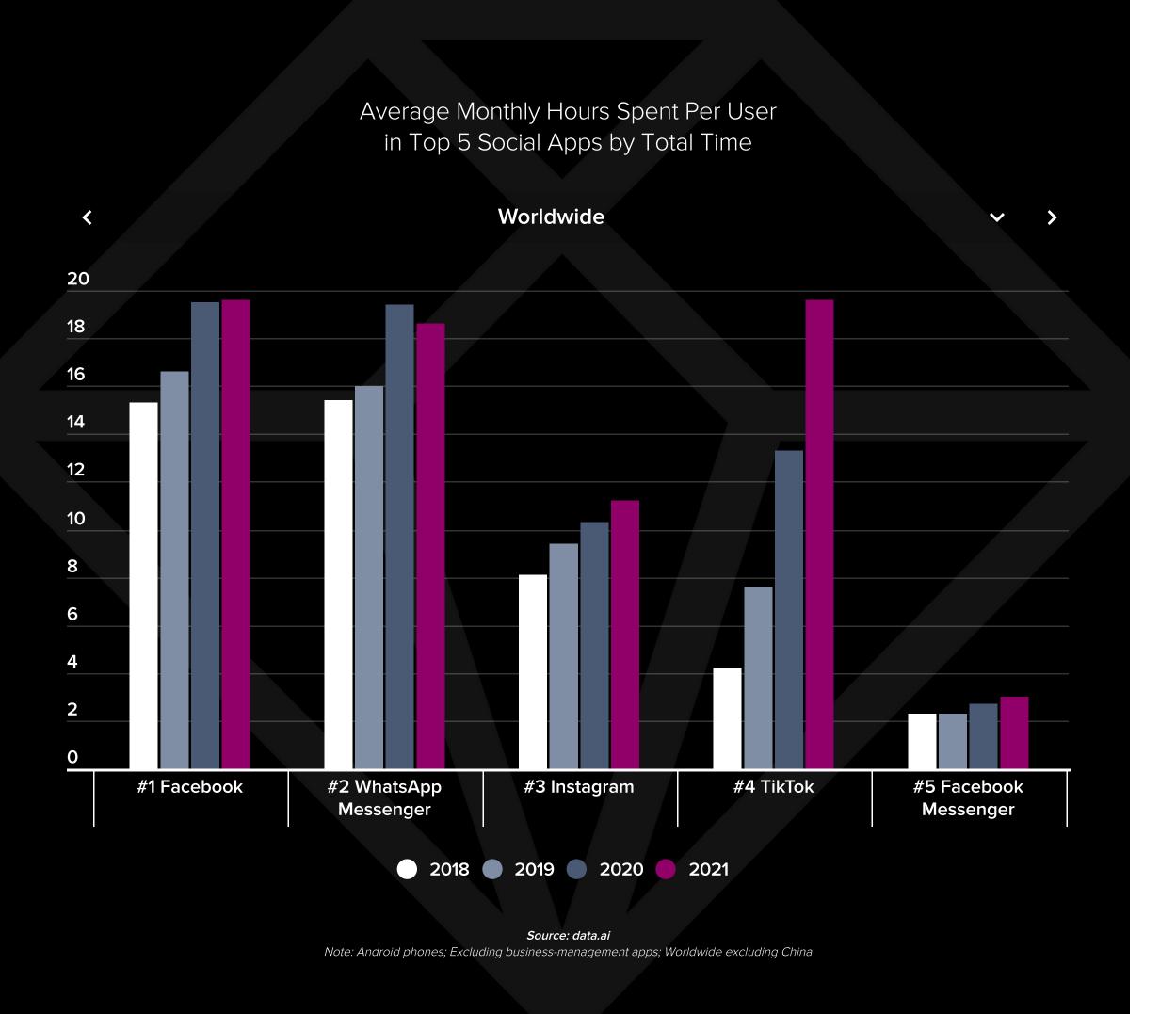
Social apps are the linchpin to connection in our mobile-first world. Live streaming apps are changing the game — providing opportunities for live shopping, content creator compensation, creative empowerment and the rise of authenticity in social apps. Keep on top of the latest social trends in data.ai.

#### Global Growth of Live Streaming Apps Among Top 25 Apps



**Source:** data.ai 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.

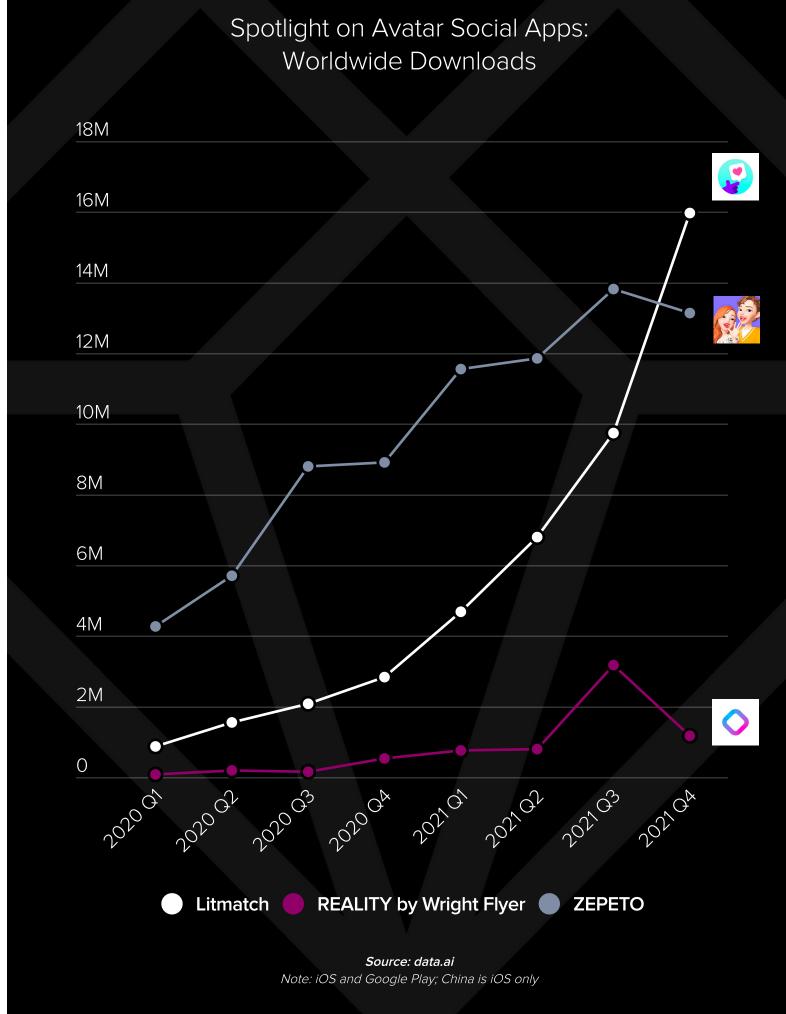
SOCIAL

# Emerging Trend: Avatar Apps Tap Into Increasing Demand for Metaverses: Social, User-Generated Content, Creativity

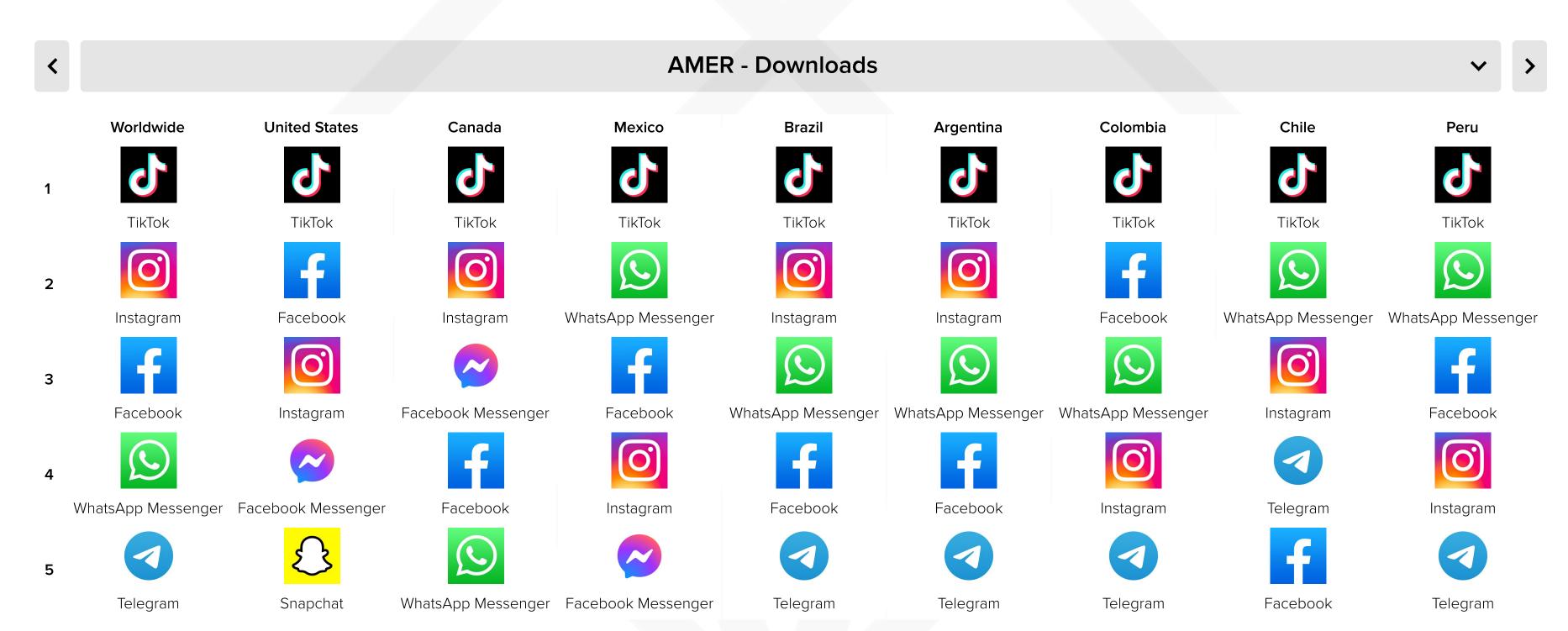
Demand for avatar social apps has grown amidst interest in metaverses in 2021, particularly H2.

Among the 3 select avatar social apps including <u>Litmatch</u>, <u>REALITY by</u> <u>Wright Flyer</u> and <u>ZEPETO</u>, downloads grew 160% YoY. <u>Litmatch</u> emphasizes matching with friends and using a simple avatar — highlighting the overlap of growing demand for avatar-based apps, even without a metaverse component — 2 converging trends. <u>Litmatch</u> saw downloads grow 405% YoY amidst surging demand.

Creativity, creation and connection are at the core of growing interests in 2022. Mobile is the pulse of the cultural zeitgeist. Monitor rising stars to be among the first to capture shifts in these trends.



## 2021 Rankings by Market | Social



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

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

# Travel

DiDi as a global leader in ride-hailing services, continues to grow rapidly in international markets in providing affordable ride-hailing and food delivery services in 2021. data.ai is an integral analytics platform for our marketing planning process. With its trusted mobile insights covering the app landscape we are better equipped to optimize our user acquisition, retention and engagement programs. It also helps us prioritize our roadmap and plan new markets entry.

Ajay Kaul Global Performance Marketing Head DiDi



# Downloads of Travel Apps Rebound by 20% in H2 driven by Sharp Increases from July — Dec 2021

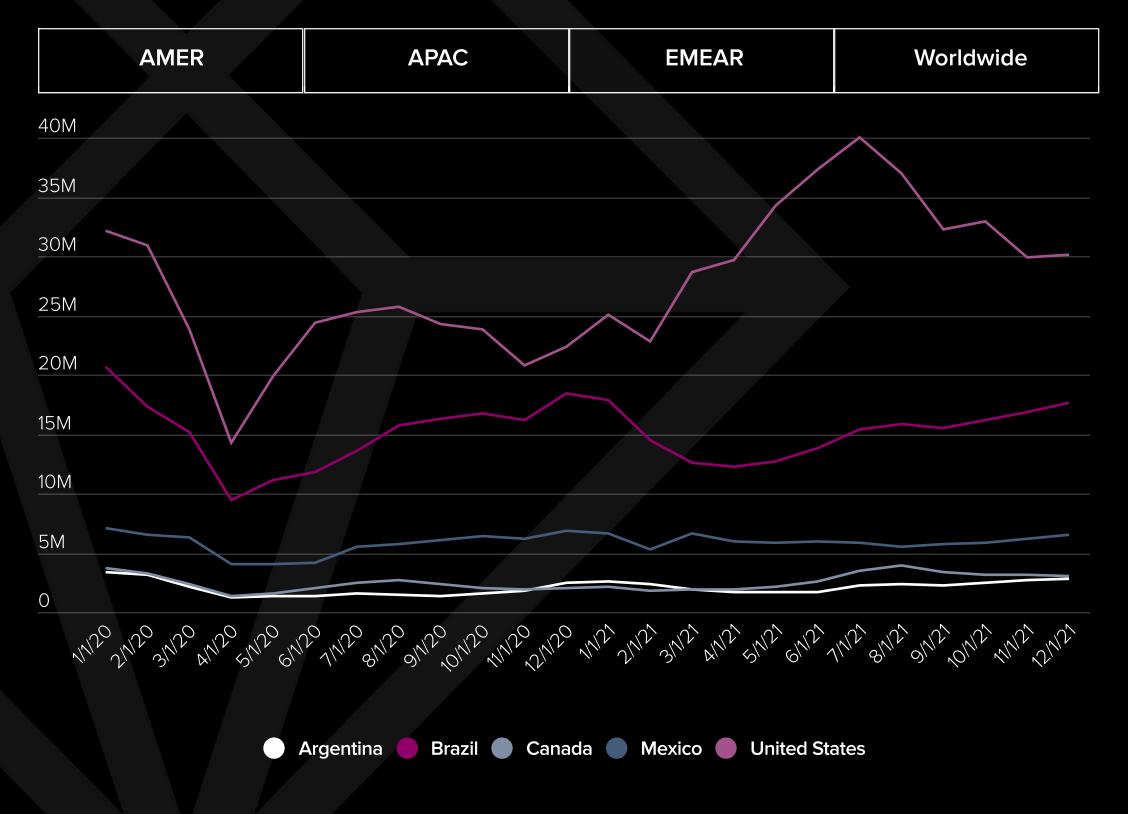
The second half of 2021 showed positive trends for travel on mobile. H2 2021 downloads hit 1.95 billion worldwide, nearing pre-pandemic levels of 2.08 billion in H2 2019.

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

Note: iOS and Google Play; China is iOS only

TRAVEL

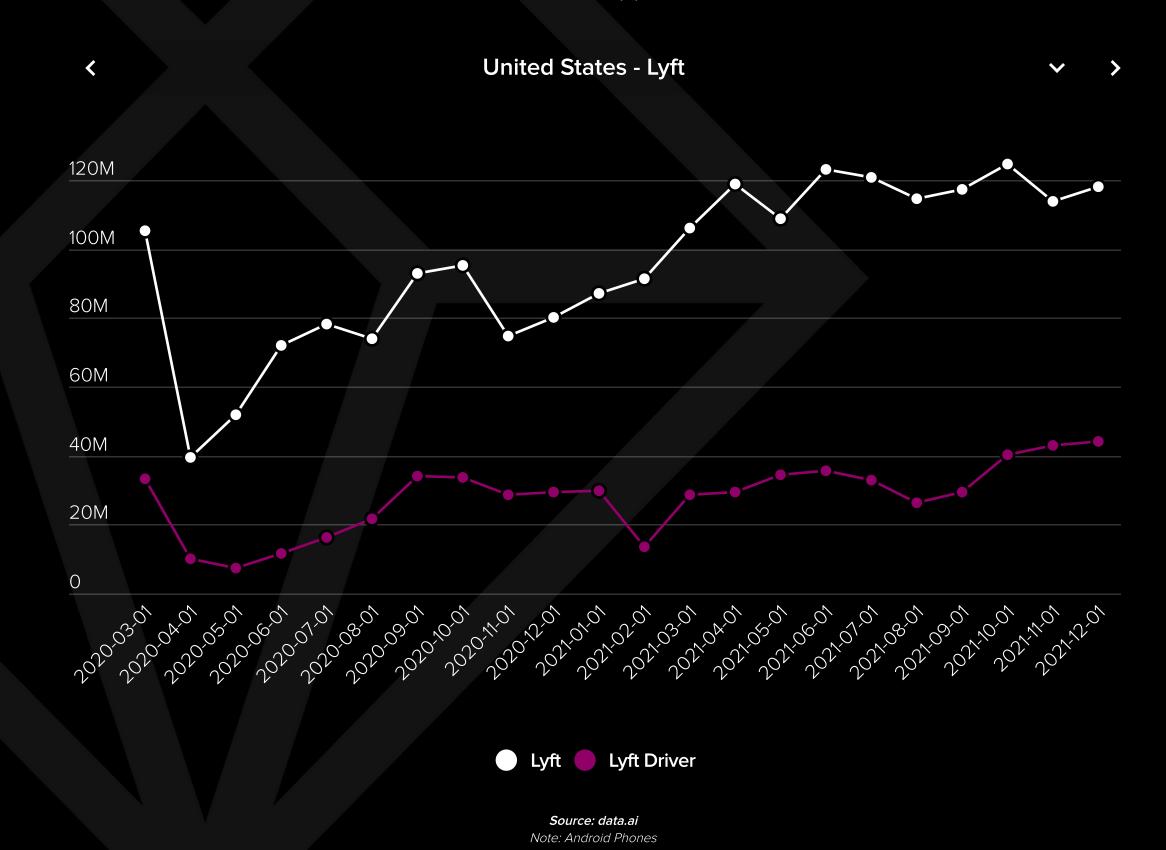
# Drivers vs. Riders: Rideshare Supply & Demand Dynamics Differ Across Regions

Demand for rideshare apps has returned to normal levels, even higher in some regions. In the US, <u>Uber</u> riders spent nearly 212 million sessions in the app in December 2021.

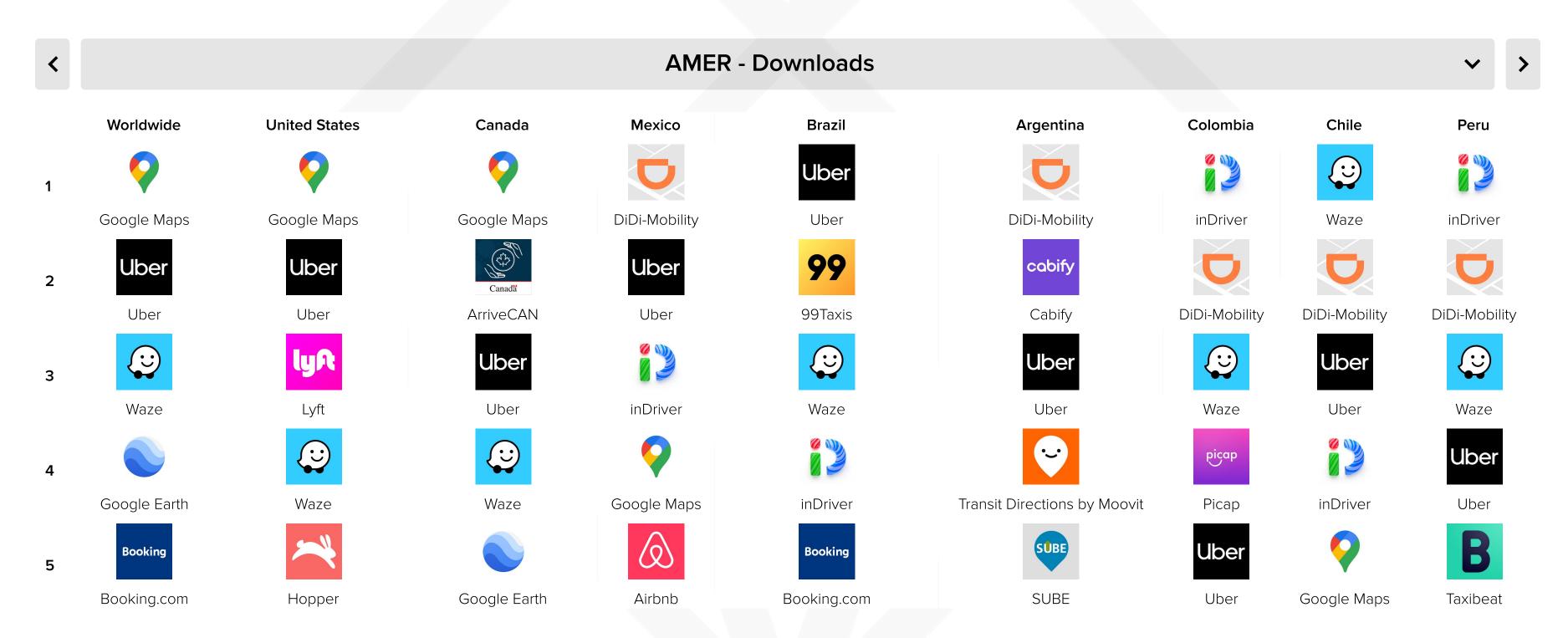
Riders spend 3 sessions for every 1 driver session on <u>Lyft</u> in the US, showing demand for on-demand transport. In the UK, "supply" of available, active drivers was nearly equal with demand from riders in 2021.

Marketplaces face the balancing act of supply and demand in real time. Monitor mobile data to keep track of market movement.

#### Monthly Sessions Spent in Select Rideshare Apps "Driver" vs. "Rider" Apps on Android



## 2021 Rankings by Market | Travel



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

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

# Dating

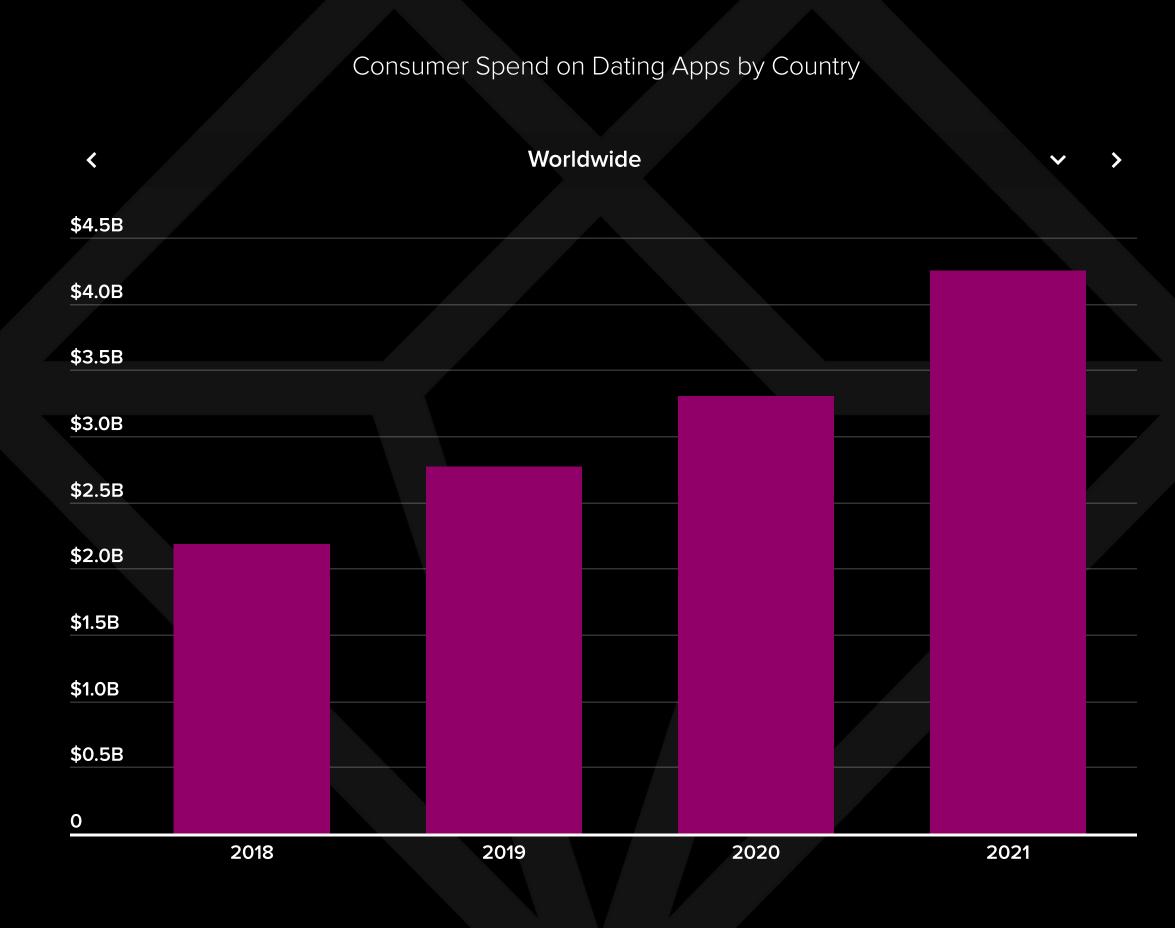
#### DATING

# Worldwide Consumer Spend on Dating Apps Surged Past \$4B in 2021, Seeing a 95% 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**Note: Consumer Spend across iOS, Google Play

#### DATING

# Users of Dating Apps With GenerationallyUnique User Bases More Likely to Skew Male in Most Regions Except for Australia

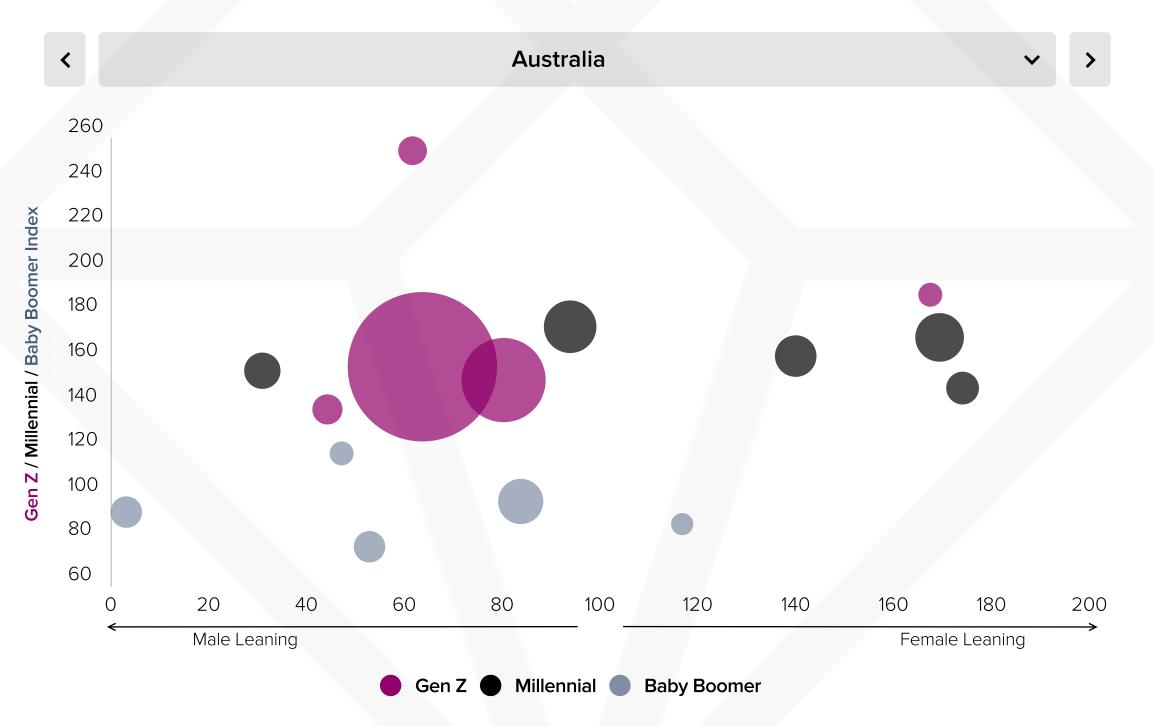
<u>Taimi, Hily</u>, and <u>Tinder</u> tend to be more popular among Gen Z in the US.

Gen X & Baby Boomers in North America and Australia tend to use 'mobile-forced' dating apps; among those, *Zoosk* and Match.com tend to be popular. *SCRUFF, Bermuda, and Plenty of Fish Online Dating bucked* the trend and saw popularity among Baby Boomers despite being mobile-first providers.

Compare dating apps across countries in data.ai.

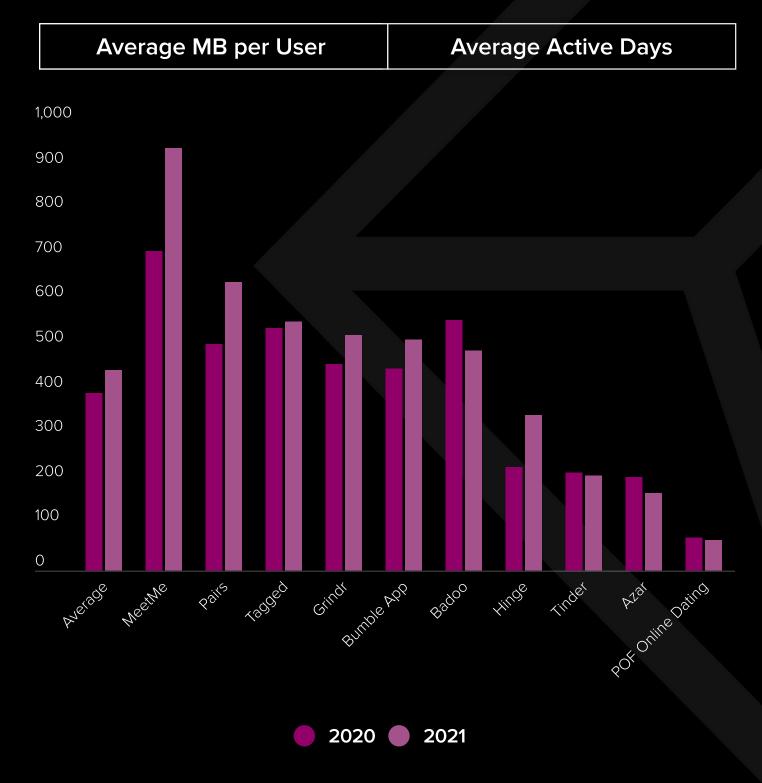
# Top 5 Dating Apps Used as Ranked by Generational Index, 2021

Index >100 Skews Towards Demographic Group



**Source:** data.ai Note: 2021, iPhone and Android phones; Gen Z represented by those aged 16 -24; Millennials represented by those aged 25-44; Gen X / Baby Boomers represented by those aged 45+; Top 5 Dating apps by Demographics Index (a measure of demographic cohort compared to the overall population) among top 25 Dating apps by average MAU overall; bubble size corresponds to average MAU of each demographic cohort

#### Monthly Avg Active Days vs Data Usage per User Among Top 10 Dating Apps Worldwide by Consumer Spend in 2021



**Source:** data.aiNote: Android phones only; Average active days per month; "Average Sessions per User represents the average number of sessions per active user in a given month throughout year. Average Active Days represents the average days of use across all active users in a given month throughout year.

DATING

# Among the Top 10 Dating Apps Worldwide by Consumer Spend, Most Apps Saw an Increase in Usage Two Years Into the Pandemic

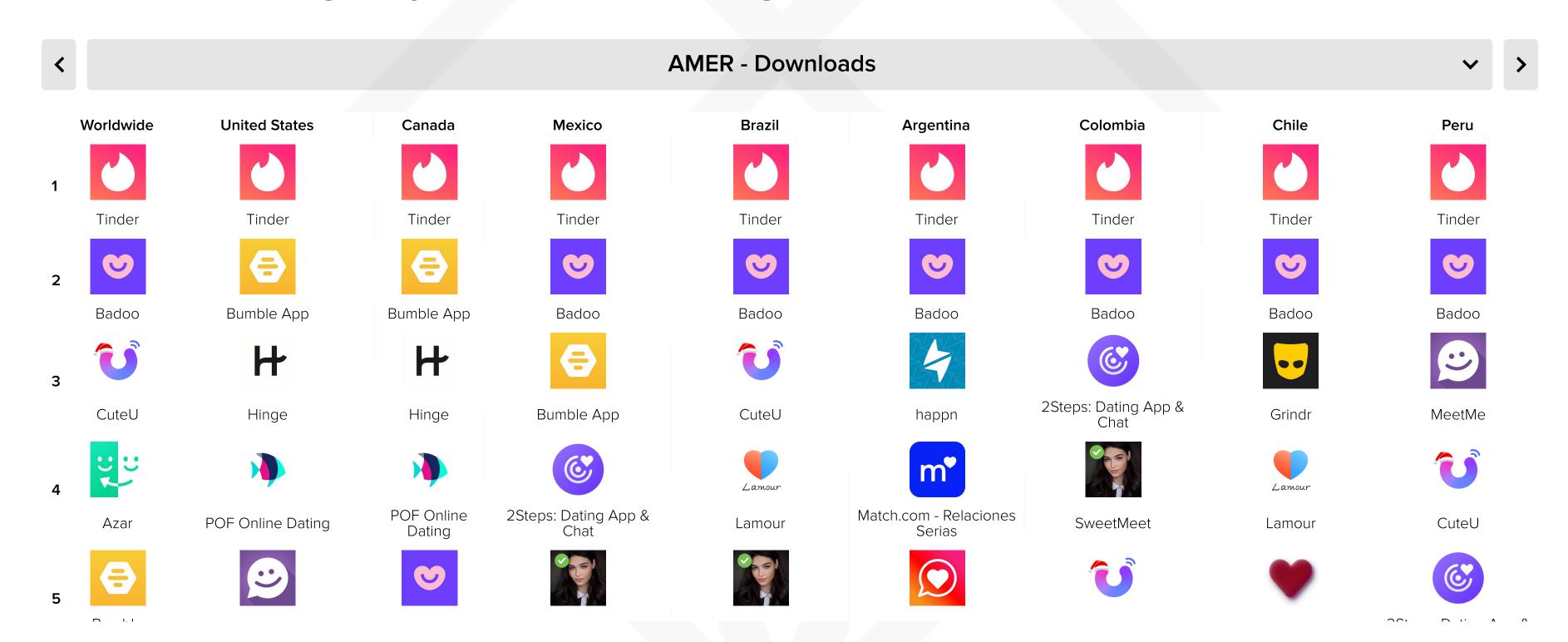
The top grossing dating apps also tended to have high average MB per user, signalling the rising popularity of using photos and videos to communicate. However, higher usage does not always correlate with higher consumer spend.

<u>Tinder</u> saw a slight decline in average MB per user but saw a record-breaking \$1.35B in consumer spend worldwide in 2021, maintaining its lead thanks to a 35% increase YoY.

Tinder's pricing model works well among its large user base, with its free-to-use model that charges users for extra features such as Boosts and Super Likes included in in-app subscriptions and purchases. It even <u>dynamically</u> <u>adjusts its price based on the user's age</u> - a proxy for demand.

Understanding each dating app's target audience and user behavior is crucial to its success. <u>Explore engagement and monetization strategies</u> in data.ai.

## 2021 Rankings by Market | Dating



Learn More: Uncover the **Top Dating Apps by Yearly Downloads** 

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

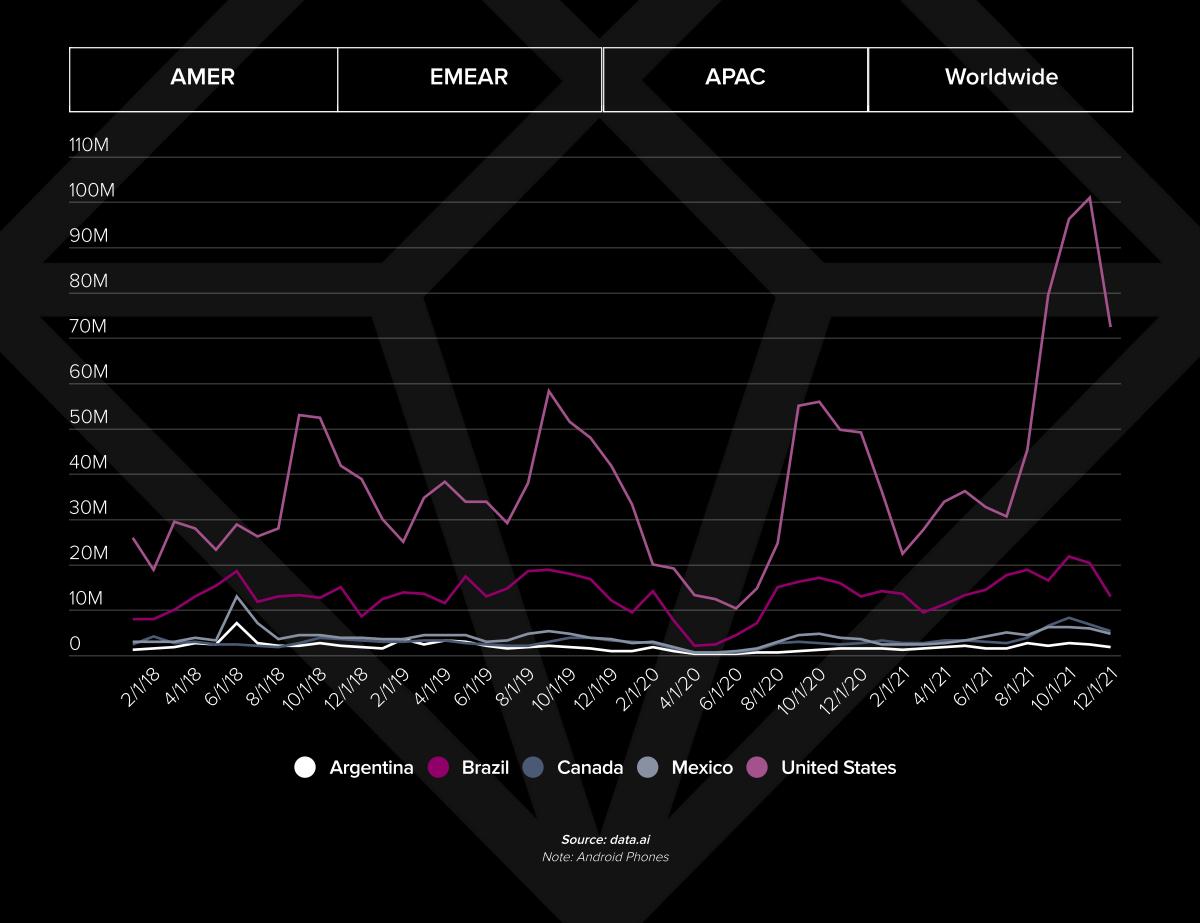
# Other Industries Embracing Mobile

data.ai continues to be one of our most trusted tools and partners, helping us keep an eye on market trends and competitive benchmarks. Marketability from the game concept stage is a pivotal strategic pillar at Rovio, so we continue to work closely with data.ai on new features that help us in identifying market opportunities.

Luis de La Camara VP Marketing Rovio



#### 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.

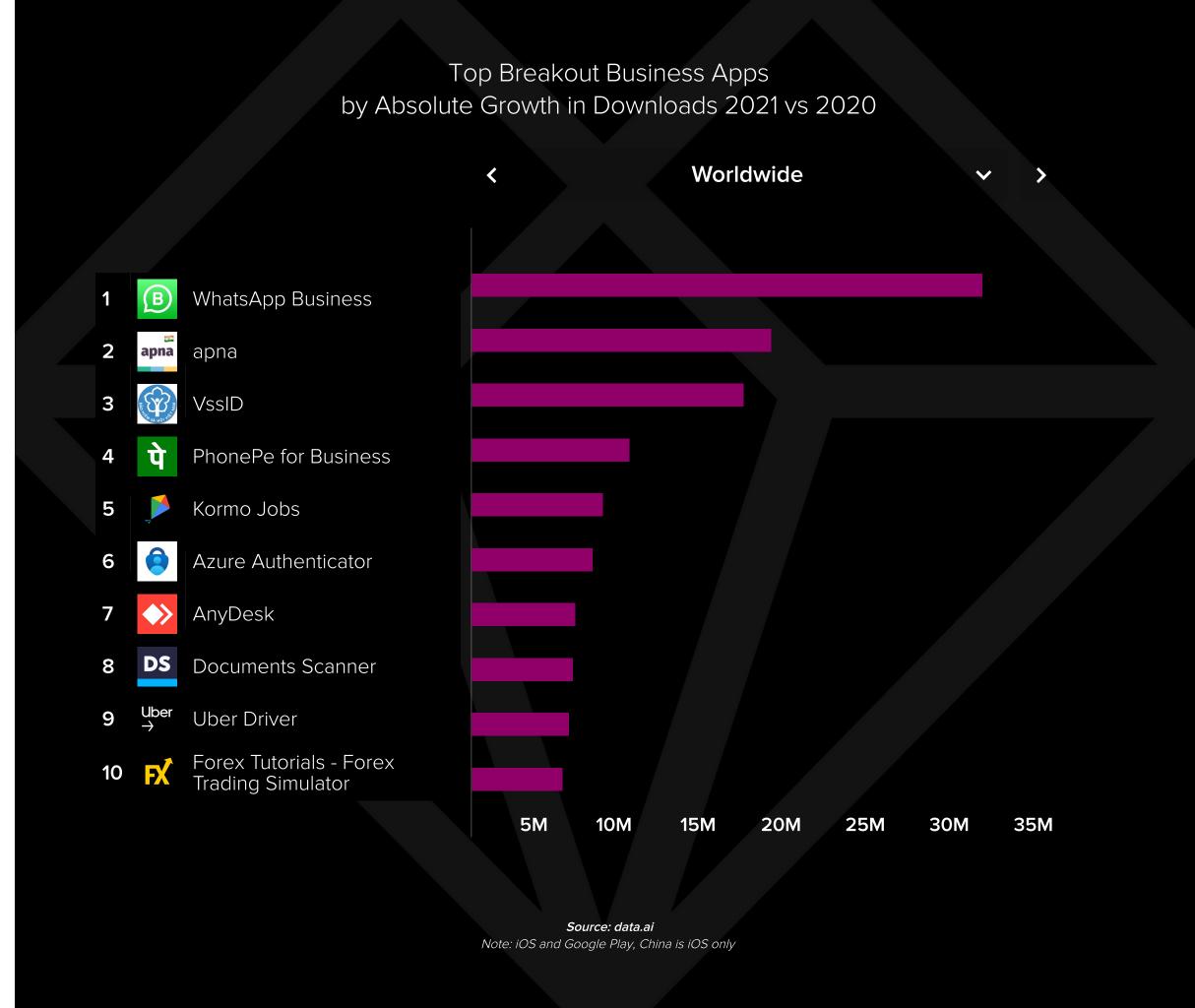
Benchmark your app against market trends
to see if you are in-line with, out-pacing or falling
behind the market.

# The Great Resignation? More Like The MobileEmpowered Work Force

Job searching platforms like <u>Sonic</u> and <u>Apna</u> were the #1 breakout apps by downloads in the UK and India, respectively.

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** 

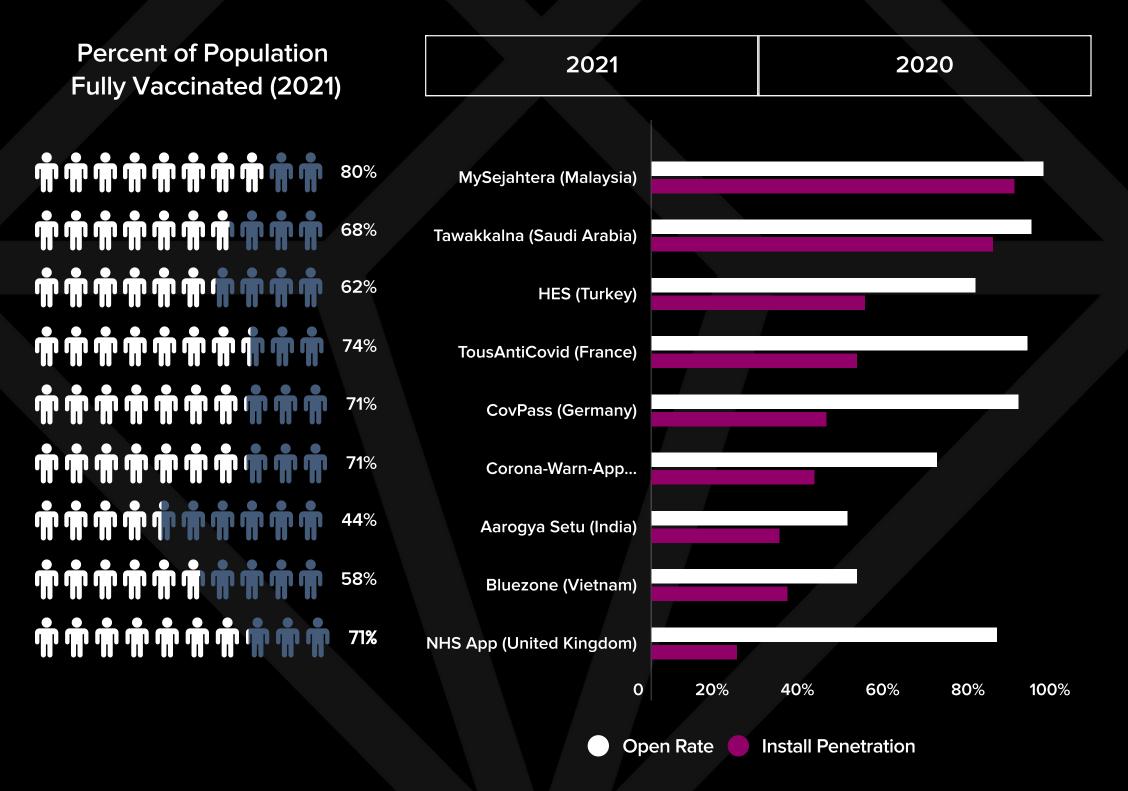
# Vaccine Rollout & App Engagement Are Crucial Drivers of the Ongoing Effort to Combat Covid-19

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. Although <u>India's Aarogya Setu</u> app saw the highest downloads, surpassing 100M since launch (April 2020), it saw declines in open rate YoY. 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 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

Worldwide **DOWNLOADS CONSUMER SPEND MONTHLY ACTIVE USERS** TikTok Short Videos (Entertainment) Short Videos (Entertainment) Facebook Social Networks (Social Media) Media Sharing Networks (Social WhatsApp Instagram YouTube Video Sharing (Entertainment) Communication (Social Media) Messenger Media) Facebook Facebook Social Networks (Social Media) Dating (Social Media) Communication (Social Media) Messenger Media Sharing Networks (Social WhatsApp Communication (Social Media) Disney+ OTT (Entertainment) Instagram Messenger Media) Communication (Social Media) OTT (Entertainment) E-Commerce (B2C) (Shopping) Telegram Amazon Video Media Sharing Networks (Social Short Videos (Entertainment) TikTok Snapchat Comics (Books & Reference) piccoma Media) Facebook **HBO Max** Communication (Social Media) OTT (Entertainment) Telegram Communication (Social Media) Messenger ZOOM Cloud File Management (Utility & Meeting (Business) Google One MicroBlogging (Social Media) Twitter Productivity) Meetings Video Editing (Photo & Video) Twitch Live Streaming (Entertainment) Spotify Music & Audio (Entertainment) **BIGO LIVE** Netflix Music & Audio (Entertainment) Live Streaming (Entertainment) OTT (Entertainment)

#### Learn More: Uncover the Most Popular Apps By Market

**Source:** data.ai 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

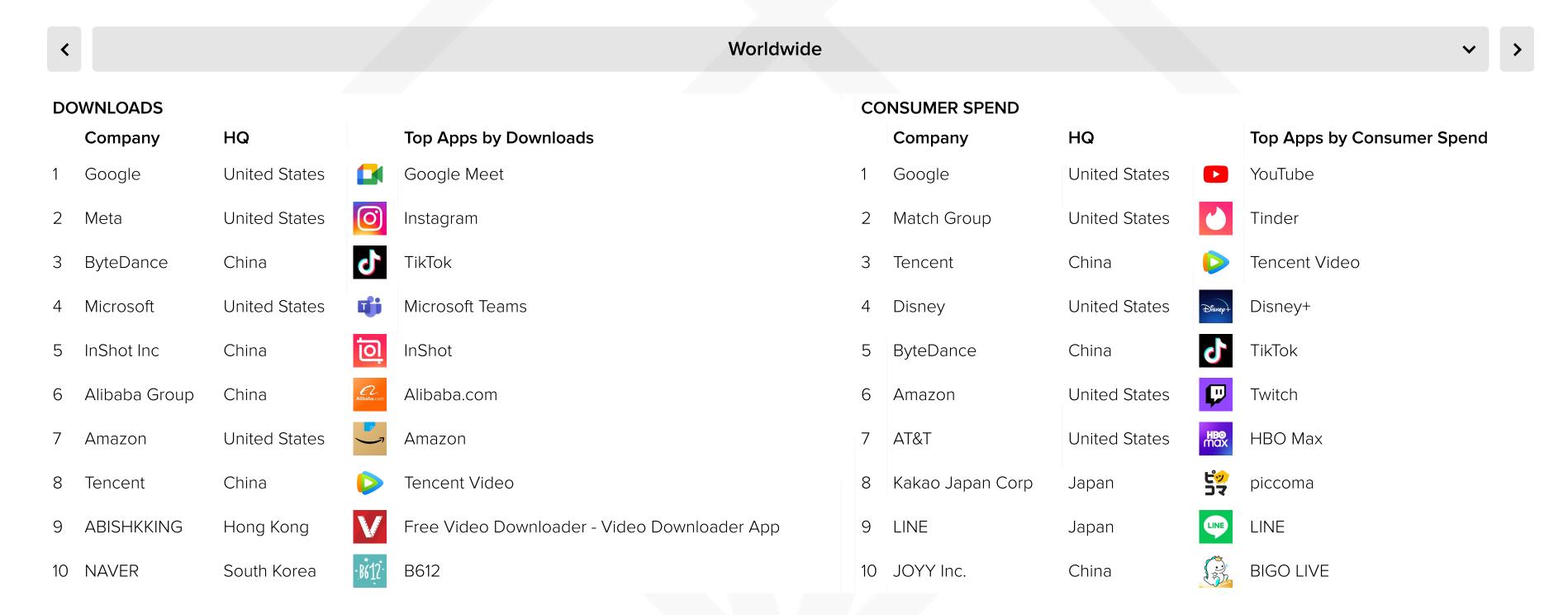
### 2021 Rankings by Market | Top Games

Worldwide **CONSUMER SPEND MONTHLY ACTIVE USERS DOWNLOADS** Creative Sandbox ROBLOX Free Fire **PUBG MOBILE** Battle Royale (Shooting) Battle Royale (Shooting) (Simulation) Creative Sandbox ROBLOX Subway Surfers Runner (Action) Genshin Impact Open World RPG (RPG) (Simulation) Creative Sandbox 3 Coin Master ROBLOX Candy Crush Saga Luck Battle (Party) M3-Saga (Match) (Simulation) Free Fire Bridge Race Honour of Kings .io (Hypercasual) MOBA (Action) Battle Royale (Shooting) Candy Crush Saga M3-Saga (Match) Among Us! Mafia/Betrayal (Party) M3-Saga (Match) PUBG MOBILE Battle Royale (Shooting) **PUBG MOBILE** Ludo King Battle Royale (Shooting) Board Game (Tabletop) Creative Sandbox Minecraft Pocket Ludo King Board Game (Tabletop) Pokémon GO Location RPG (RPG) (Simulation) **Uma Musume Pretty** Hair Challenge Subway Surfers Idol Training Sim (Simulation) Action (Hypercasual) Runner (Action) Among Us! Mafia/Betrayal (Party) Game For Peace Battle Royale (Shooting) Call of Duty: Mobile Team Deathmatch (Shooting) Join Clash 3D Action (Hypercasual) Homescapes M3-Meta (Match) Pokémon GO Location RPG (RPG)

#### Learn More: Uncover the Most Popular Games By Market

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

### 2021 Rankings by Market | Top Companies - Games

**CONSUMER SPEND DOWNLOADS** HQ Top Games by Downloads Top Games by Downloads Company HQ Company Project Makeover Honour of Kings **United States** Tencent China AppLovin Fantasy Westward Journey aquapark.io NetEase China Voodoo France WormsZone.io Candy Crush Saga Azur Interactive Games Cyprus Activision Blizzard **United States** DOP 2: Delete One Part SayGames Playrix Homescapes Belarus Ireland Empires & Puzzles ironSource Bridge Race **United States** Israel Zynga Phone Case DIY Supercell Clash of Clans Finland Crazy Labs Israel BINGO Blitz Hair Challenge Playtika Zynga **United States** Israel ROBLOX China 8 Ball Pool Roblox United States Tencent 1945 Air Forces Marvel Contest of Champions OneSoft Vietnam Netmarble South Korea Jinke Culture - Outfit7 My Talking Tom Friends Genshin Impact China miHoYo China

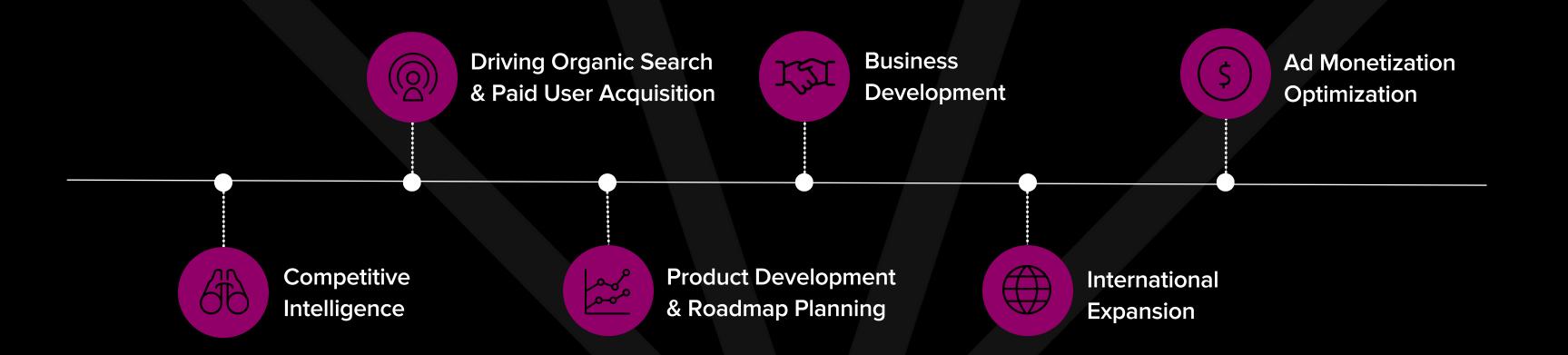
Worldwide

Learn More: Uncover the Top Games Publishers Across Different Markets

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

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# We Fuel Mobile Excellence & Monetization



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