

# Exploring INSEA's mobile app landscape

Emerging app benchmarks and trends in India and Southeast Asia



ADJUST



**Sensor** Tower





Industry stats and trends5
The methodologies7
Part 1: Gaming 8
Downloads, installs, and sessions9
In-app revenue11
Stickiness and retention17
Part 2: Fintech20
Downloads, installs, and sessions21
Stickiness and retention28

Part 3: Shopping	30
Downloads, installs, and sessions	
Session length	
Stickiness and retention	
Part 4: Entertainment	40
Downloads, installs, and sessions	4 <sup>-</sup>
Stickiness and retention	47

#### INTRODUCTION

# Mobile marketing opportunities grow as app demand soars

The mobile app market in India and Southeast Asia (INSEA) is booming as a growing number of internet users increasingly turn to their smartphones for communication, entertainment, shopping, and more. India and Indonesia are among the top five countries in the world for smartphone adoption by volume of users and by percentage of population. Meanwhile, Malaysia, Singapore, and the Philippines each reached a 90% internet penetration rate in 2022.

Rising digital infrastructure across INSEA has led to a surge in demand for apps that cater to local needs. Over the course of the past several years, the economy and consumer demand for mobile apps have also soared, largely in part due to the COVID-19 pandemic. Developers have been able to capitalize on this ample opportunity and create innovative applications tailored specifically for these markets. We have begun to see the market shift in 2023, and we can expect to see continued changes moving forward. Where the mobile advertising market was broadly booming, it is now time to zero in on which verticals are signaling the highest potential for opportunities over the coming year.

Together with Sensor Tower, we analyzed mobile app data across INSEA over 2021 and 2022, as well as January 2023. We focused on several high-performing key verticals with the leading impact on the local markets. Keeping in mind these industry trends and user behavior patterns, app marketers can begin to form a picture of what's to come over the remainder of 2023. In turn, this insight can be combined with increasingly standardized practices for a complete marketing strategy.



"Alongside the business challenges it inevitably manifested, the pandemic and a few globally impactful crises since have brought about an unprecedented acceleration of mobile app growth in the INSEA region. Unfortunately, a boosted economy will eventually begin to ease up. As a picture of the post-COVID app market has begun to take form, India and Southeast Asia have demonstrated impressive adaptability and endurance. Subsequently, 2023 promises to set the stage for new app growth and opportunities for development."

**ADJUST** 



Ajit Pawar,

Director Partnerships,

APAC, Adjust

## Industry stats and trends



Wireless broadband subscribers in India in October 2022.



65% of bank customers in Singapore carry out their banking on a mobile app most often.



Mobile games in Southeast Asia are expected to generate revenue of US\$5.82 billion by 2023.



India is the largest mobile games market by downloads in the world. In Q1 2023, India game downloads were up 13%. YoY to more than 2.5 billion. This was more than triple the secondlargest market, Indonesia, at 8.4 million downloads during the quarter.



There were 20 million new internet users in SEA in 2022 alone.



Mobile apps across INSEA are poised for continued growth into coming years with a continued upward trajectory of smartphone and wireless broadband adoption predicted in the region.



"Since 2017, India has surpassed the United States in app installs. Nowadays, combined with Southeast Asia, the two largest emerging mobile markets generated 32% of global app installs in 2022. INSEA has a large consumer base, who primarily access the internet through smartphones. This region is home to local tech leaders like PhonePe, JioCinema, Garena, and DANA, and is also crucial for many global giants to expand their reach and achieve further growth. Check out our report to equip your 2023 business strategy with the latest insights into these markets."

Sensor Tower



Nan Lu,

Director of APAC Marketing,

Sensor Tower

## The methodologies





## **ADJUST**

#### DATASET:

Adjust's top 5,000 apps were analyzed. We looked at data for fintech, shopping, entertainment, and gaming apps, including several game subverticals. Our data comes from two sources: One includes a list of 45 countries and one with approximately 250 based on the ISO 3166-1 standard. Installs are defined as the first opening of an app after downloading onto the user's mobile device.

#### DATE RANGE:

January 2021 - January 2023



#### DATASET:

Sensor Tower looked at data for fintech, shopping, entertainment, and game apps. Downloads are defined as the download of an app onto the user's mobile device. Download metrics in this report are unique downloads per iOS or Google Play account only. Pre-installs, re-downloads, app updates, and subsequent downloads on new or additional devices for existing iOS or Google Play accounts were not counted.

#### DATE RANGE:

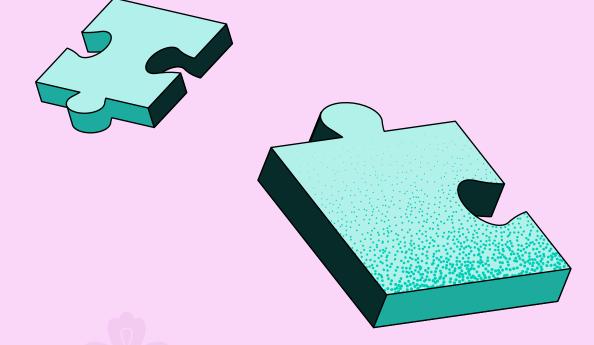
January 2021 - December 2022



### PART1

# Gaming

Mobile gaming is one of the most promising markets in India and Southeast Asia (SEA). In 2022, Google revealed that 80% of the SEA population plays mobile games, and one in three smartphone owners play mobile games at least once a week. In 2023, India is predicted to reach 209.6 million mobile gamers, making it not only an extremely interesting space for local developers and advertisers but an incredibly lucrative one for the export market.







# Exploring INSEA's mobile app landscape

## Gaming downloads by category

Source: Sensor Tower

India					
Game genre	Total downloads	HQ contribution			
Action	1.15B	4%			
Arcade	856M	7%			
Board	458M	49%			
Casuals	1.19B	3%			
Puzzle	841M	3%			
Roleplay	472M	3%			
Simulation	868M	9%			
Games all	5,844,660,380	8%			

	SEA	
Game genre	Total downloads	HQ contribution
Action	11.5M	4%
Arcade	4.74M	1%
Board	2.68M	21%
Casuals	11.7M	2%
Puzzle	9.13M	1%
Roleplay	5.98M	11%
Simulation	8.77M	6%
Games all	54,661,235	4%



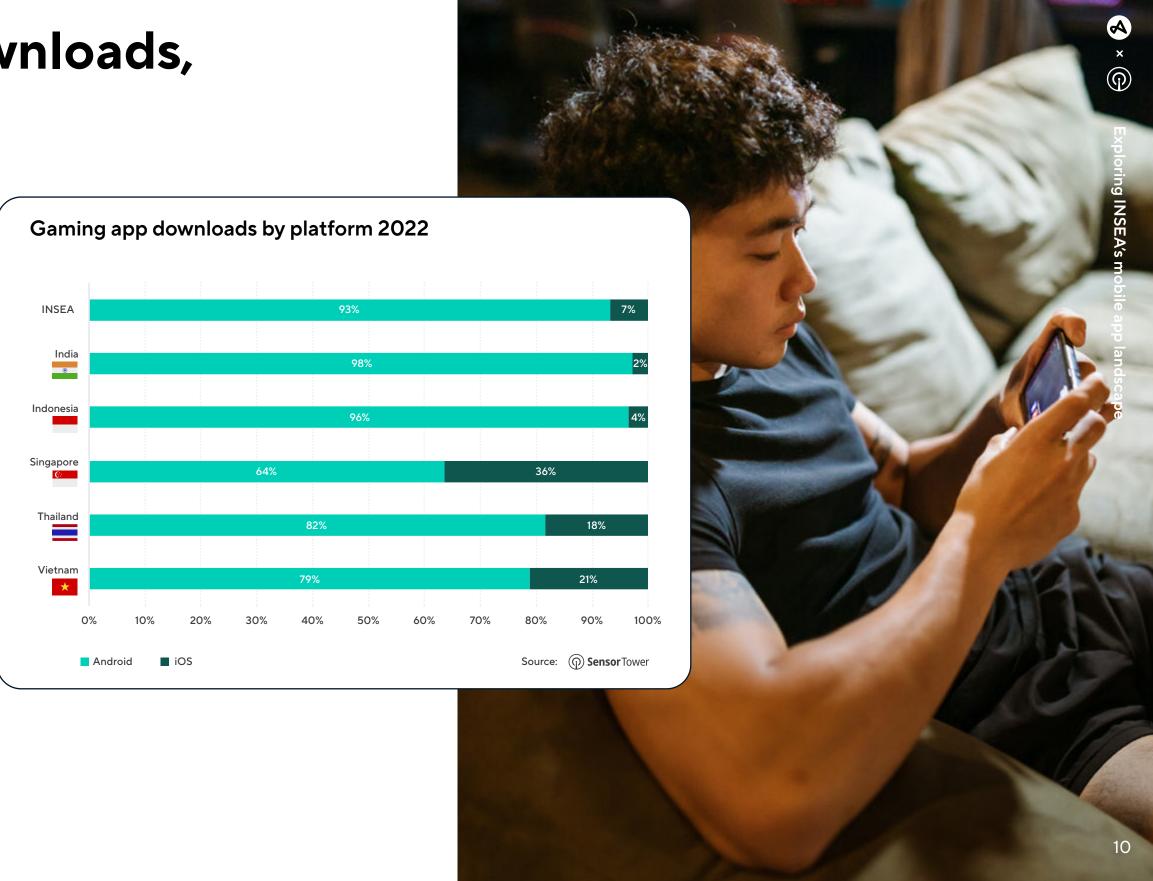




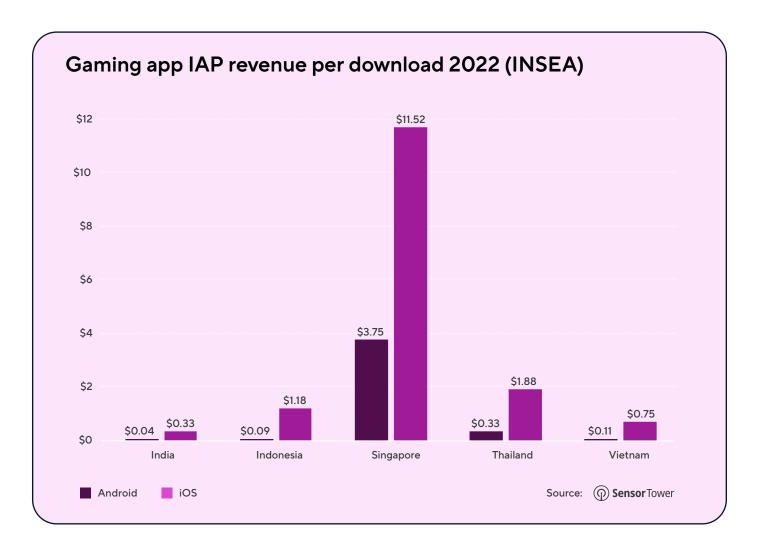
Of all downloads from Vietnam, 27% were from the local headquarter (HQ); for Indonesia, it was 31%!

# Android leads downloads, but not revenue

Unsurprisingly, Android downloads dominated the gaming app market across INSEA, at 93% for the region. This regional average was surpassed in India (98%) and Indonesia (96%). Singapore gaming app downloads were the most balanced across platforms at 64% Android downloads and 36% iOS downloads.



However, it's important to note that iOS downloads of gaming apps bring in significantly higher revenue per download than Android downloads. This is particularly true in Singapore, where revenue per download soars high above the rest of INSEA at \$3.75 per Android download and \$11.52 per iOS download. While it must be taken into consideration that iOS users cost more to acquire, this contrast in revenue is important for app developers and marketers to consider when developing an airtight monetization strategy.



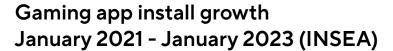
Also of note is the roleplay gaming subvertical's durable profitability. Roleplay games brought in the highest revenue per download across India and SEA in 2022, peaking at an incredible \$20.08/download in Singapore. Gaming developers looking for a subvertical to direct their focus to in 2023 can confidently explore the roleplay game domain. Gaming developers already working in the roleplay space can confidently count on Singapore gamers' willingness to pay up for good experiences.

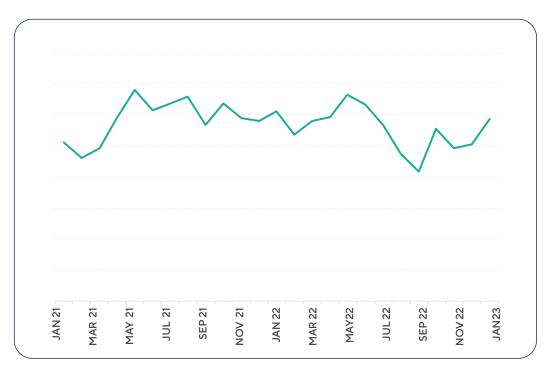
Gaming app revenue per download 2022 (INSEA)			Source:   Sensor Tower		
Game genre	India	<b>★</b> Vietnam	Indonesia	<b>Thailand</b>	Singapore
Board	\$0.01	\$0.07	\$0.38	\$0.08	\$0.98
Roleplay	\$0.02	\$0.52	\$0.38	\$1.65	\$20.08
Action	\$0.11	\$0.14	\$0.14	\$0.73	\$5.22
Casuals	\$0.03	\$0.08	\$0.04	\$0.23	\$2.35
Arcade	\$0.00	\$0.02	\$0.01	\$0.02	\$0.21
Simulation	\$0.01	\$0.10	\$0.04	\$0.21	\$2.90
Puzzle	\$0.01	\$0.04	\$0.03	\$0.15	\$1.59
Games all	\$0.03	\$0.12	\$0.09	\$0.43	\$4.60

# Gaming app installs and sessions on the rise in 2023



Following a challenging 2022 for gaming apps globally, 2023 is starting to show some promise again, which is why we're shining a light on it. As demonstrated below, a considerable uptick in India and Southeast Asia can be seen in average installs and sessions starting around October 2022 and continuing through to January 2023.





Gaming app session growth

January 2021 - January 2023 (INSEA)





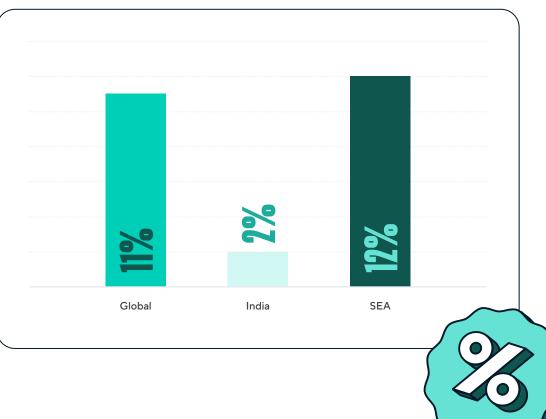
×

More precisely, between Q4 2022 and January 2023, gaming app installs in SEA grew by 20%, just behind the global average of 22%. India also charted 4% growth. Looking at sessions, Southeast Asia also saw impressive growth at 12% (one percentage point up on the global average) and India came in with a 2% bump. While growth for gaming app installs and sessions can be seen across the board, India has ample opportunity to grow installs and sessions in line with regional and global trends throughout the remainder of 2023.

## Gaming app install growth percentages January 2023 vs. Q4 2022



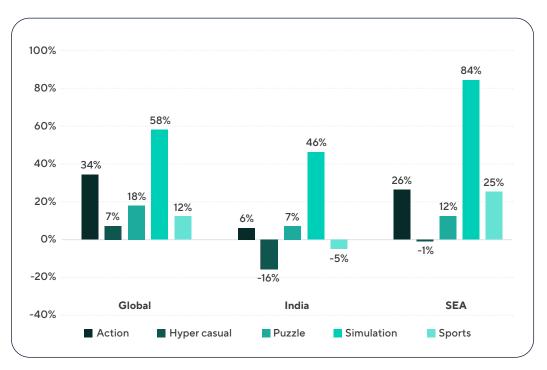
## Gaming app session growth percentages January 2023 vs. Q4 2022



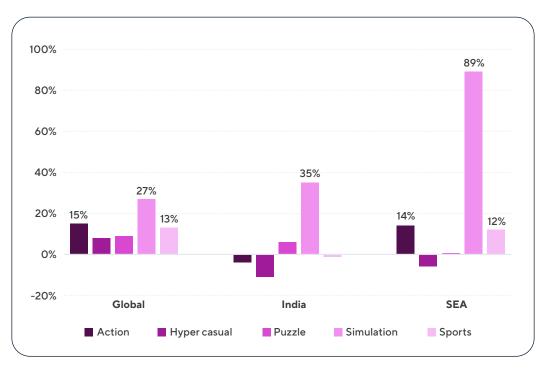
Continuing to take a more granular look at some of our gaming subverticals, we see that simulation games showed the most significant growth in installs and sessions between Q4 2022 and January 2023. In SEA, they grew an impressive 84% in installs and 89% in sessions; in India they jumped by 46% and 35%, respectively.

Sports games also charted well across the board, while action games saw a considerable uptick (a 26% install boost in SEA!), and sports and hyper casual games saw mixed results. While simulation is clearly demonstrating itself as a strong category in the region in 2023, overall interest in gaming apps shows ample opportunity for advertisers and developers to begin considering increasing UA spend while also developing more robust retention strategies, which we get into later.

## Gaming app install growth percentages by vertical January 2023 vs Q4 2022



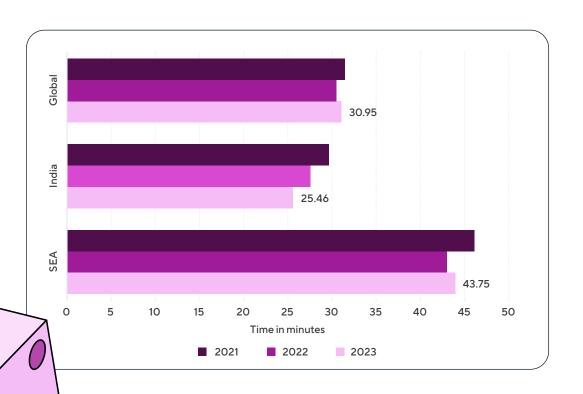
## Gaming app session growth percentages by vertical January 2023 vs Q4 2022



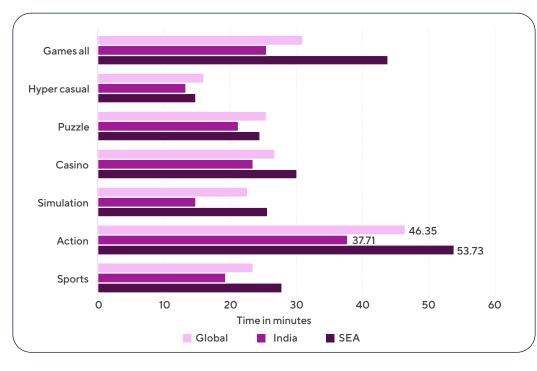


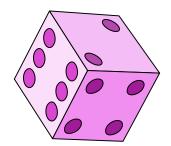
While session lengths are slightly down throughout the region between 2021 and 2023, we are seeing a positive uplift on last year, pointing to opportunity. Gaming apps in SEA have been particularly strong in session lengths so far in 2023 at an overall average of 43.75 minutes. Taking a closer look at subverticals, it's action games that take the lead at an average of 53.7 minutes in-app in SEA, 37.7 minutes in India, and 46.3 minutes globally.

#### Gaming app session lengths 2021 - 2022



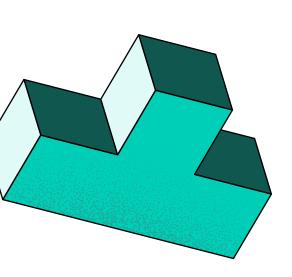
#### Gaming app session lengths by subvertical (2023)

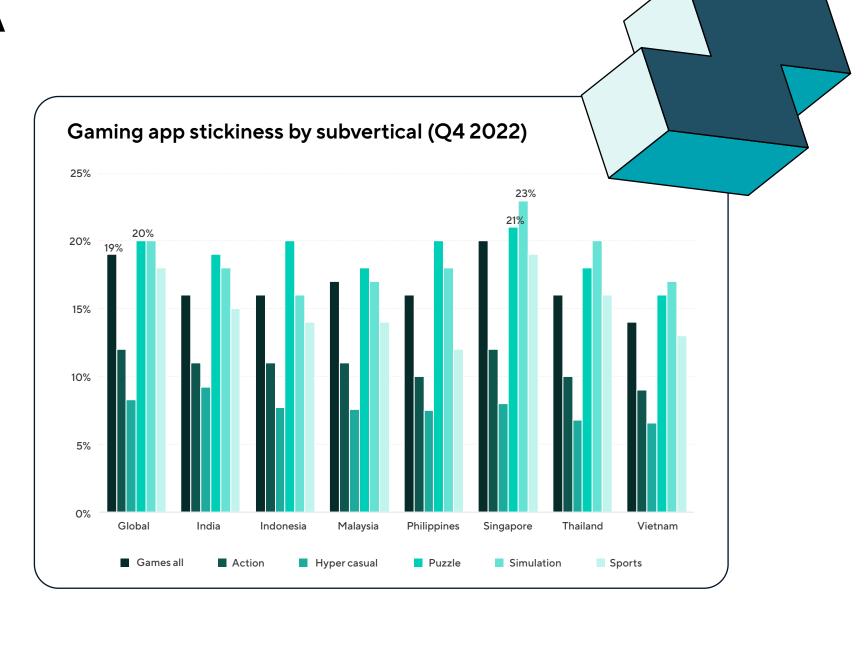




# Puzzle apps are sticky across INSEA

Mobile game apps in INSEA showed promising stickiness rates in Q4 2022, with puzzle games emerging as the standout vertical in most countries. With a stickiness rate of 20% globally, as well as in Indonesia and the Philippines, puzzle apps in Singapore reached an impressive 21%. However, the real star in Singapore was simulation apps with a stickiness rate of 23% in Q4 2022, surpassing the puzzle peaks of other countries in the region and all gaming apps globally.







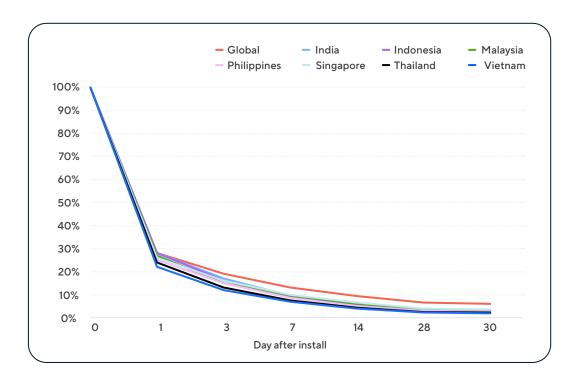
We did see a variance in gaming app stickiness between Q3 and Q4 2022. Globally, there was a drop from 20% to 19%. While Thailand and Vietnam managed to hold steady, India, Indonesia, the Philippines, and Singapore all experienced a slight dip. Malaysia was the only country in the region to see a slight uplift (one percentage point), landing at 17% in Q4 2022. Along with retention, this is a clear area for improvement as we move further into 2023.



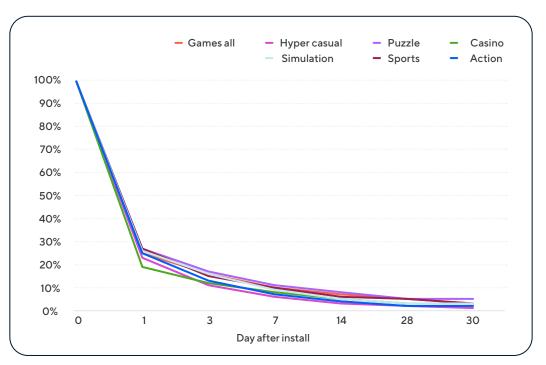
Gaming apps in India (28%), Indonesia (28%), and Malaysia (27%) showed the strongest D1 retention within INSEA in Q4 2022. However, by D14 (7%) and D30 (4%), Singapore demonstrates the healthiest rates. These figures are unfortunately significantly below the equivalent global

medians of 13% and 6%, respectively.

#### Gaming app retention rates Q4 2022



# Gaming app retention rates by subvertical Q4 2022 (India & SEA)



#### **BONUS**

Across INSEA, puzzle games and sports games lead the way in D1 retention at 27%, with puzzle games continuing to lead through the first month, ending at 5% D30 retention.

#### PART 2

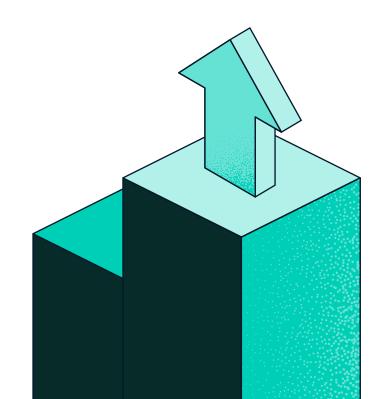
## **Fintech**

Southeast Asia is among the top regions for digital mobile adoption in the fintech/mobile finance sector. In a 2022 survey, 65% of consumers in Singapore and 71% in Indonesia claimed to perform banking tasks most often from their mobile app. This was above the digital banking usage rate in the United States (63%). This strong migration to digital banking, combined with Asia's financial market bustling to create a durable regulatory foundation for the cryptocurrency industry, led to an overall positive trend for fintech apps across payment, banking, crypto, and stock trading subverticals.



# Fintech app downloads grow despite uncertain market

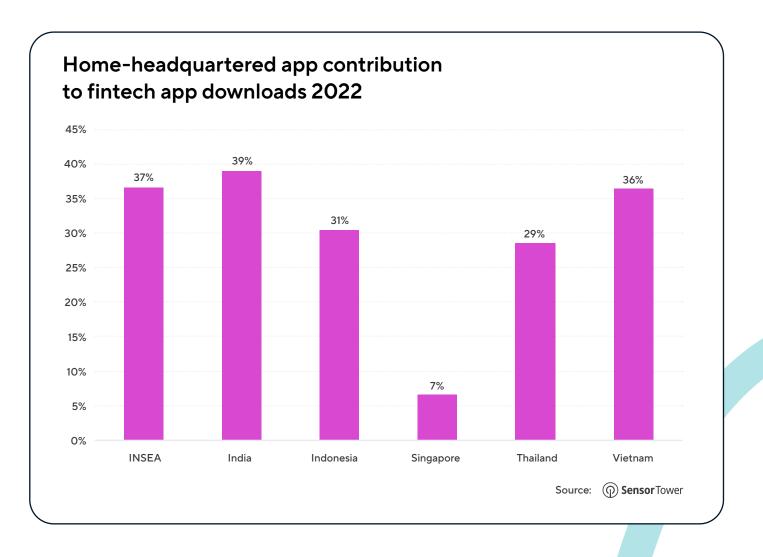
Despite global economic uncertainty in 2022 and a downturn in the stock market, average fintech app downloads grew in INSEA YoY between 2021 and 2022. India's fintech app downloads grew a sizable 32% in 2022, followed by Vietnam at 15% and Indonesia at 10%. Thailand and Singapore did, unfortunately, decline, at 11% and 2%, respectively.





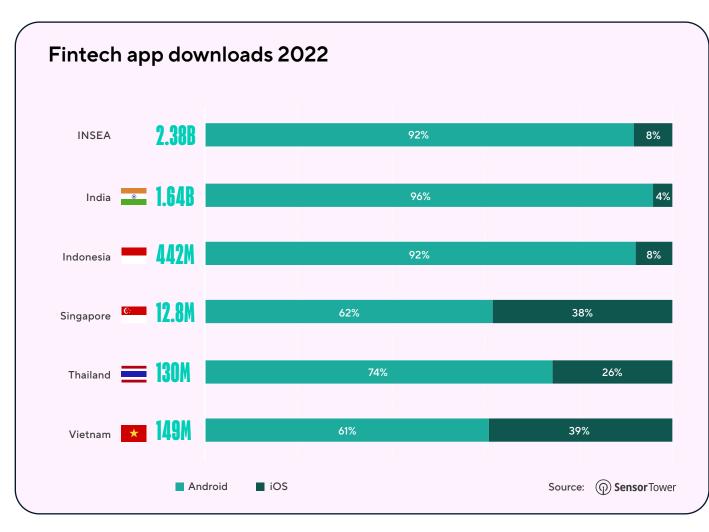
(C) Exp

Of the fintech apps we analyzed, a significant percentage of downloads within each country were attributed to apps headquartered within that market, showing that users have an affinity for home-headquartered brands. Overall, 37% of fintech app downloads across INSEA were home headquartered apps. India saw the highest headquarter contribution at 39% of total downloads in 2022, followed closely by Vietnam at 36%. These numbers demonstrate ample opportunity for export apps in the fintech sector to make inroads in the INSEA market.



Fintech was also one of the most pronounced verticals in terms of the share of Android downloads, coming in with a massive 92%. In India, downloads completed on the Google Play Store reached 96%. Singapore and Vietnam had the highest percentage of iOS downloads, at 38% and 39%, respectively—still trailing behind the Android numbers.





# Fintech app installs are holding steady

Although fintech app installs clearly demonstrated the impact of economic uncertainty over the duration of 2022, an uptick is beginning to be visible starting from around September 2022.

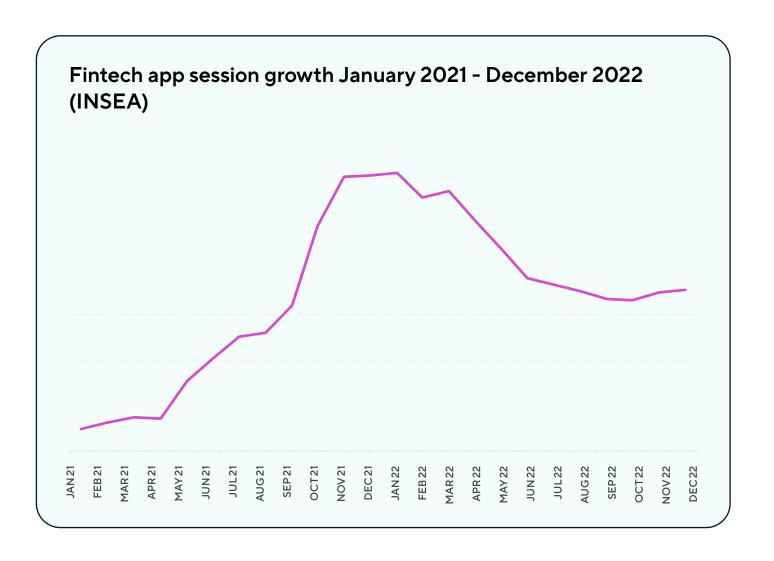
From November to December 2022, for example, fintech app installs grew by 17% month-on-month. January 2023 was also up an additional 1% compared to December 2022 and a huge 75% compared to January 2021.



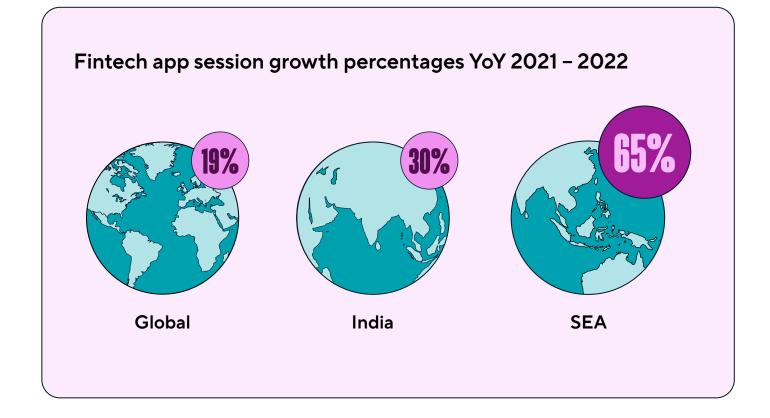
# Strong fintech opportunities as sessions stabilize

Average sessions for fintech apps in INSEA are also showing considerable promise.

Although installs largely declined throughout 2022, sessions increased consistently until around March, and despite a subsequent drop-off, average installs in 2022 were up 46% compared to 2021. From around June, sessions began to even out, with Q4 2022 up 2% compared to Q3.



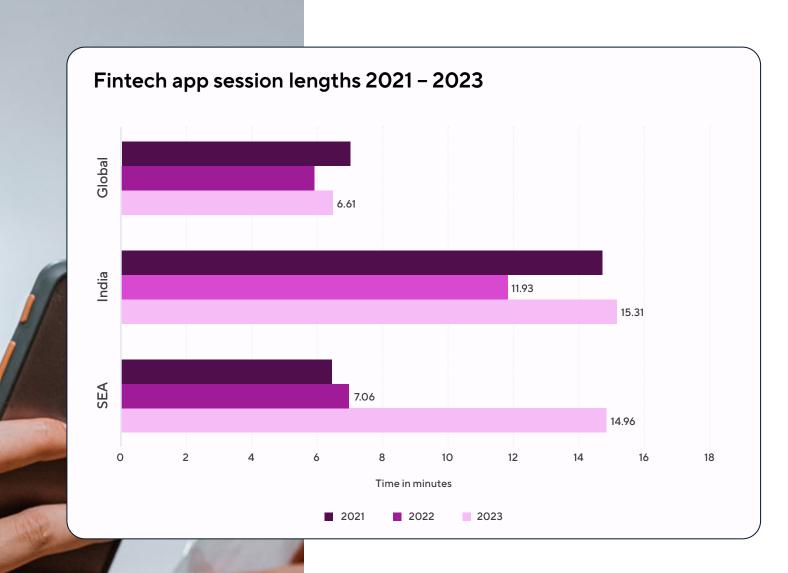






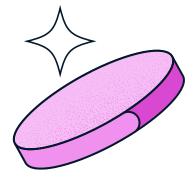






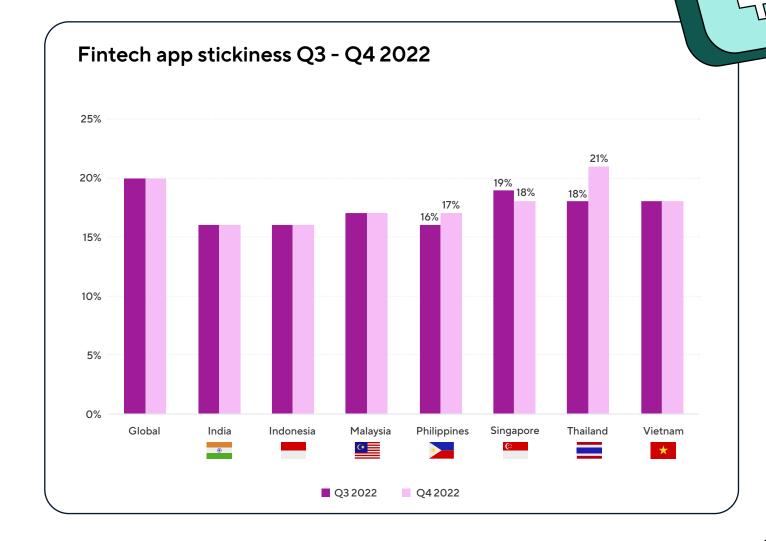
Average session lengths in 2023 so far are indicating strong growth compared to 2022's average. In SEA in particular, average session lengths have grown a huge 112% in 2023—up from 7.06 minutes to 14.96 minutes.

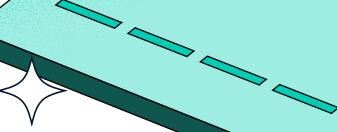
India's average session lengths have reached a sizable 15.3 minutes in the start of 2023, up from 11.93 in 2022. Both of these figures are incredibly long compared to the global average of 6.61 minutes, indicating a highly engaged user base and significant monetization opportunities for fintech apps in the INSEA region.



# Thailand's fintech apps surpass global stickiness

Our analysis shows that fintech apps in INSEA are already doing an effective job at keeping existing users engaged, but with numbers overall down compared to the global median, there's plenty of opportunity for improvement. Stickiness in H2 2022 remained consistently behind the global fintech app median of 20%, but Thailand managed to surpass it by reaching 21% in Q4 2022.





Fintech app retention rates across INSEA also fall behind the global median for retention; however, with long session lengths, there are a lot of opportunities to improve these retention rates in 2023. India and Indonesia led INSEA retention rates on Day 1 after install at 16%, followed closely by 15% retention in the Philippines.

Globally, however, fintech apps had a much higher median retention rate of 24%. By Day 7, India held the strongest retention in INSEA at 7%. Fintech apps in Malaysia, Singapore, Thailand, and Vietnam followed at 6%.

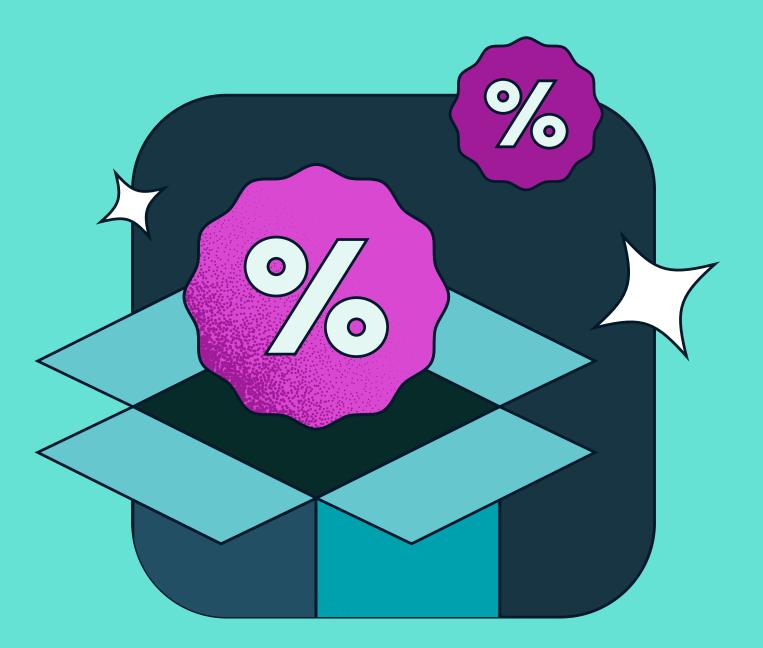


## PART 3

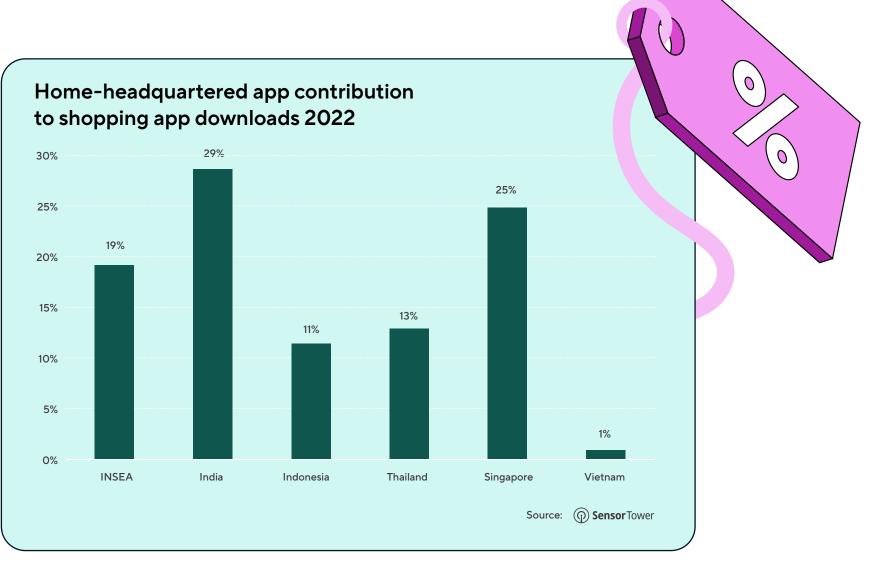
# Shopping

The pandemic brought a huge swarm of e-shoppers during COVID-19 pandemic related lockdowns when consumers had no choice but to turn to online shopping. Instead of a temporary change, a permanent shift was triggered in the commerce market, marking a cultural shopping transition from brick-and-mortar stores to e-commerce apps.





Shopping apps headquartered in each country across INSEA made a strong contribution to overall shopping app downloads within those given markets. This was particularly true for India. Indian-developed apps made up nearly one-third (29%) of shopping app downloads in India in 2022.

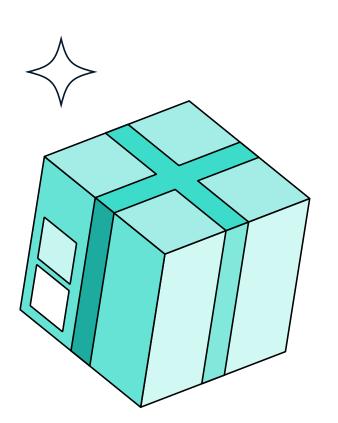


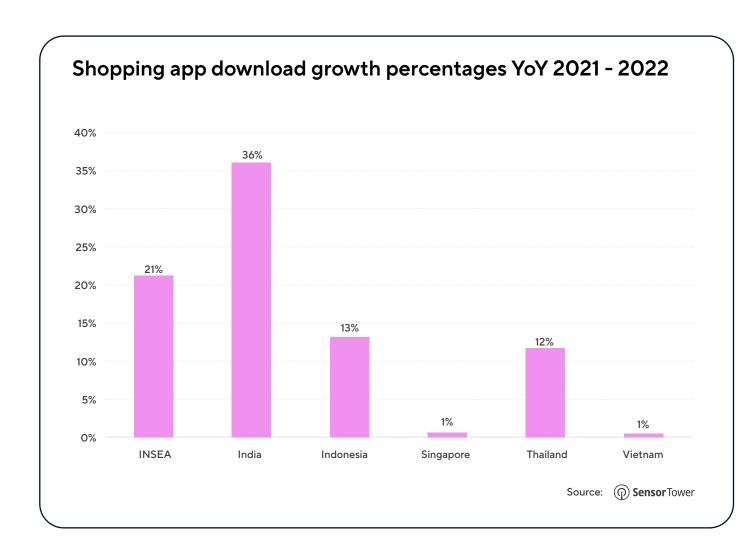






As with most verticals in the region, shopping app downloads were primarily Android-based in Thailand (61%), Indonesia (90%), Vietnam (63%) and India (96%), while iOS downloads showed a rare spark, surpassing Android downloads in Singapore (57%).





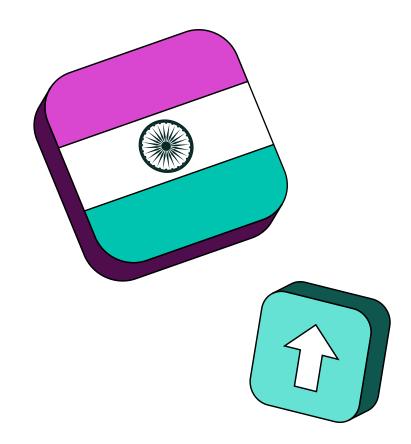
# Shopping app installs on the rise in INSEA

India's shopping app installs grew dramatically compared to the global average when looking at 2022 vs. 2021—while global installs were up 2%, India skyrocketed 43%. Although SEA saw a 3% decrease in average installs YoY, we see plenty of opportunities for marketers in the region as we delve further into the data. For INSEA overall, Q4 2022 was extremely high-performing, up 17% compared to the 2022 average.



# Sessions more than doubled in India

Following a similar trend to installs, average shopping app sessions globally increased 11% YoY between 2021 and 2022. Simultaneously, shopping app sessions in India more than doubled with an enormous 204% increase YoY. SEA, unfortunately, declined by 4%.







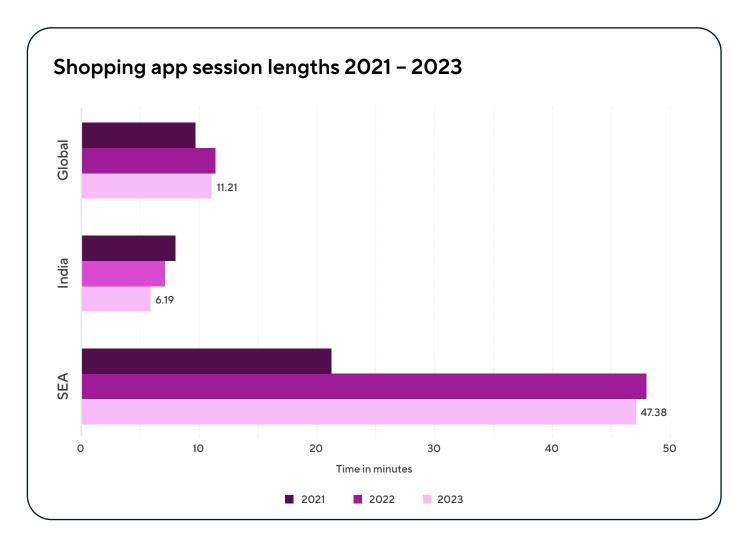




#### (P)

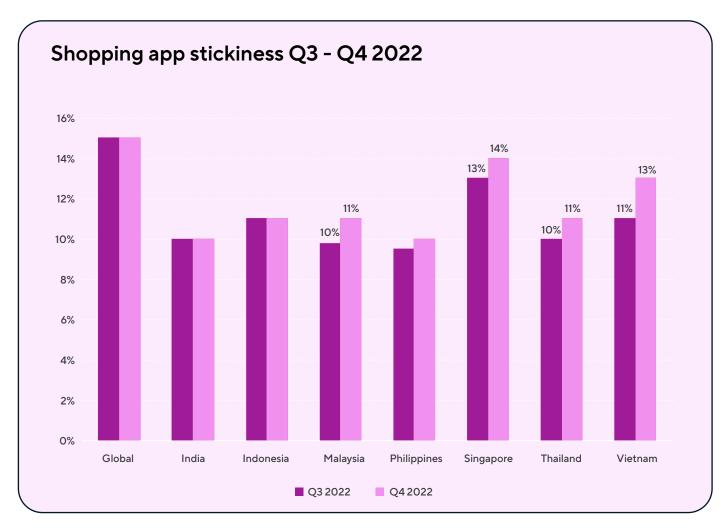
## Southeast Asia session lengths see rapid growth

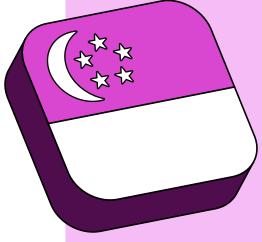
Despite a small dip in average session lengths at the start of 2023, it's clear to see there is strong growth in time spent in shopping apps compared to 2021. SEA shopping app session lengths have increased 55% on average in 2023 (47.38 minutes) compared to 2021's average of 21.27 minutes. These remarkable session lengths reflect Southeast Asia's emphatic mobile shopping culture.



## Singapore's shopping app users are particularly sticky

As noted above, despite some shopping app metrics declining in SEA, we did uncover some improvement in stickiness between Q3 and Q4 of 2022. While the global median remained steady at 15% and India maintained its position at 10%, Malaysia, Singapore, and Thailand all added one percentage point, in fact, Singapore reached the highest stickiness rate in INSEA at 14%. Vietnam added two percentage points, climbing from 11% to 13%. While improvement abounds, there's still plenty of space to reach par with global rates.







Singapore's strength in this area is even more notable when looking at D1 retention rates, where it performs one percentage point above the global median (18%). The rest of the INSEA region lags behind, unfortunately, with the Philippines and Indonesia the next best performers at 13% (D1). At the bottom of the pile is India, with a D1 retention rate of just 6%. This should be a key area of focus for all app marketers in INSEA in 2023, as improving these metrics by even one to two percentage points can yield immense opportunities for monetization and ROI.



#### PART 4

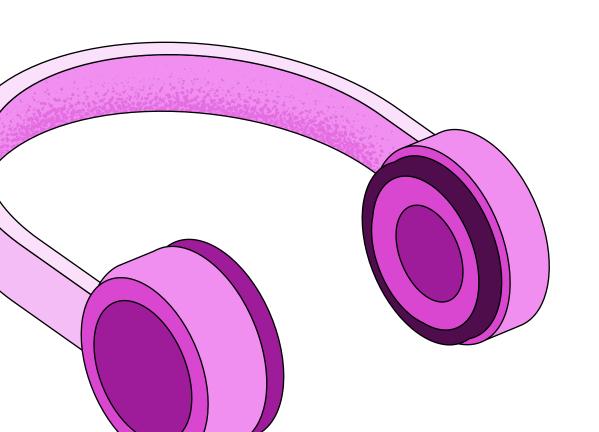
### **Entertainment**

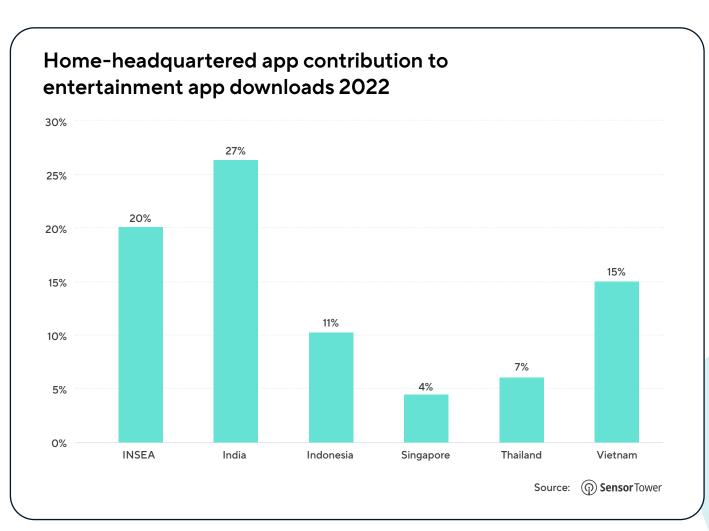
Although users in the INSEA region enjoy global entertainment apps, including streaming titles like Netflix and Disney+, the individual countries within this region also show a strong sense of loyalty to locally developed apps that feature more content produced in the countries' respective native languages. These apps provide users with a variety of content that is tailored to their region. Apps like iflix, HOOQ, Viu, and Catchplay are quickly becoming some of the most sought-after sources for information and entertainment.



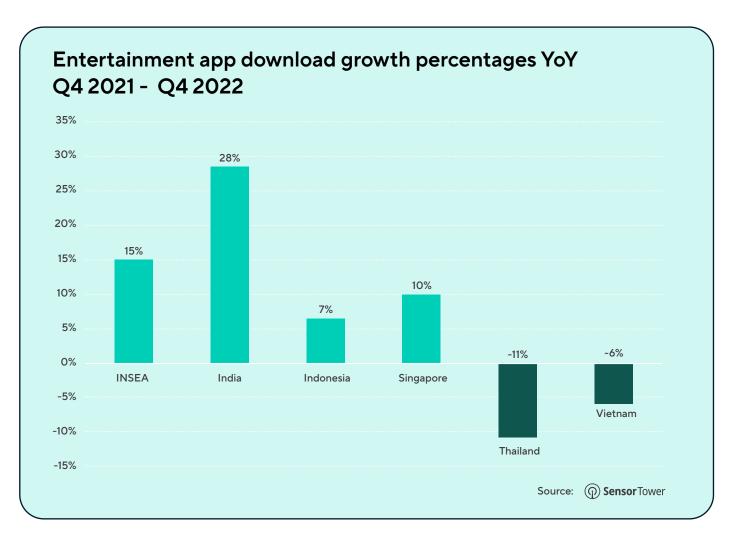
### Indian apps make a significant contribution to entertainment downloads

In terms of home-headquartered contribution, the country that loves its home-grown apps the most in INSEA is India. In 2022, 27% of entertainment app downloads in India were from Indian apps, followed by Vietnam with 15% of its downloads stemming from home, and Indonesia with 11%.

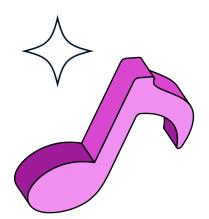


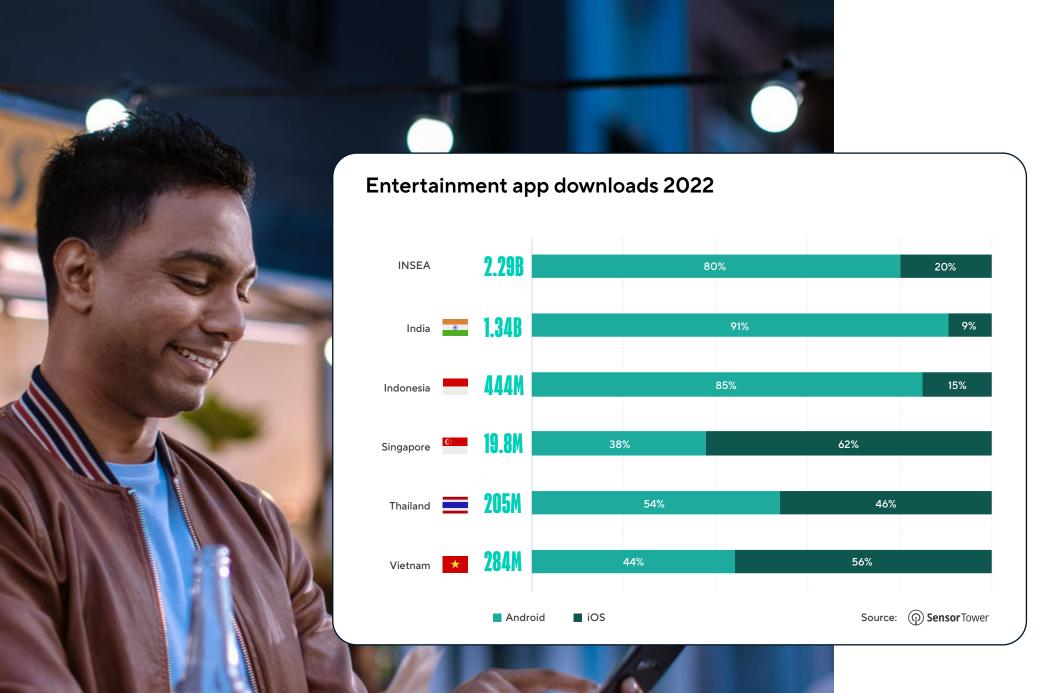


Overall, entertainment downloads were up 15% YoY in Q4 2022 compared to Q4 2021 for the INSEA region. India, Indonesia, and Singapore were the three markets that managed to chart positive growth at 28%, 7%, and 10%, respectively. While Thailand and Vietnam were in the negative, the overall trend indicates a promising direction as we move further into 2023.









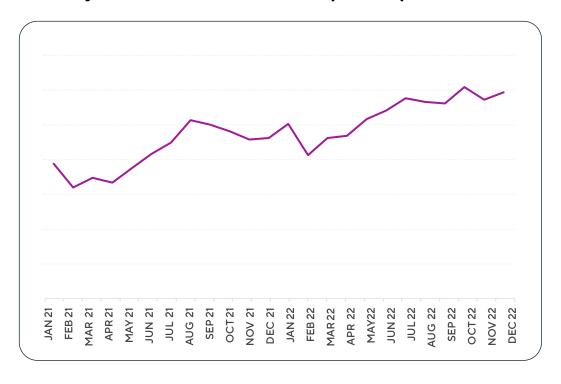
Google Play dominates the app market in most countries, although iOS leads downloads in Vietnam (56%) and Singapore (62%). Overall, however, 80% of entertainment app downloads in the INSEA region were from the Google Play Store.



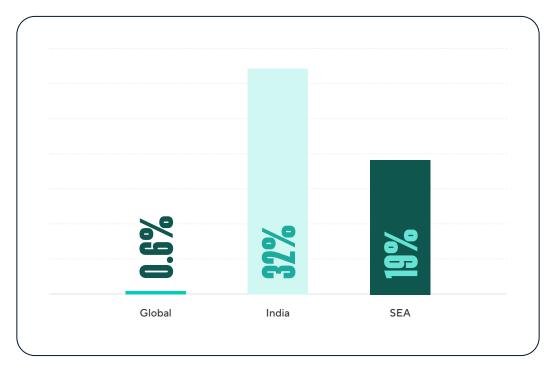
## Entertainment installs in INSEA far surpass global trends

Entertainment app installs in INSEA performed consistently from January 2021 through to December 2022. SEA's entertainment apps grew by 19% and India's by a marked 32%. As a whole, the region saw a 27% increase in installs when comparing 2022's install average to 2021's average.

### Entertainment app install growth January 2021 - December 2022 (INSEA)



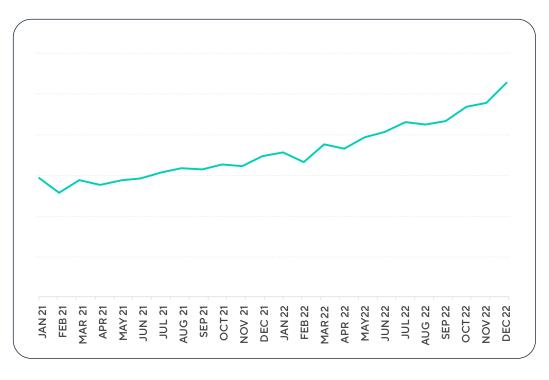
### Entertainment app install growth YoY 2021 - 2022



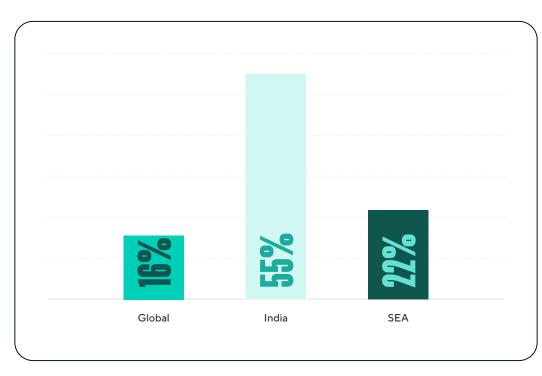
# Entertainment sessions continue growing rapidly

INSEA sessions saw an even greater increase than installs, climbing steadily over the past two years and ultimately growing 38% YoY. Taking a closer look, we see that global entertainment app sessions grew 16% YoY between 2021 and 2022, while SEA's sessions experienced 22% growth, and India's sessions shot up by 55%.

### Entertainment app session growth January 2021 - December 2022 (INSEA)

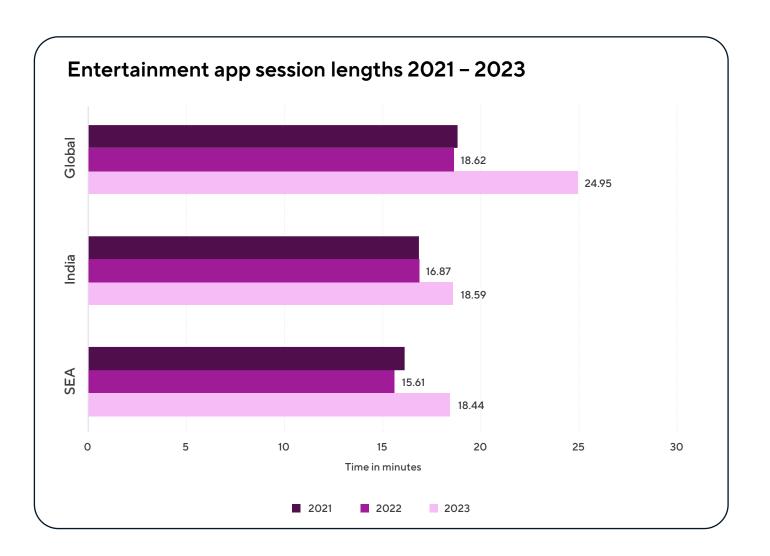


### Entertainment app session growth percentages YoY 2021–2022



### Session lengths on the rise in 2023

Although entertainment app session lengths saw a slight dip globally and in SEA in 2022, they've improved drastically so far in 2023. By January, SEA session lengths had increased to an average of 18.44 minutes (up from 15.61), close behind India's average of 18.59 minutes (up from 16.87).



## Southeast Asia surpasses India in entertainment app stickiness

Although we've seen a lot of standout statistics coming from entertainment apps in India, it's countries across SEA that took the lead in stickiness by the end of 2022. Malaysia and Thailand led the way in Q4 2022 at 13% each, followed by Indonesia and Singapore at 12%. Unfortunately, the entire region lags behind the global median of 16%.



We can see a similar trend in retention rates across INSEA. India's entertainment app retention in Q4 2022 dipped to 11% on D1, followed by 7% on D3, 4% on D7, 2.5% on D14, and 1.6% by D30. The Philippines, Indonesia, and Singapore led D1 retention rates for SEA at 17% on D1. Although retention remained nearly neck-and-neck between the three countries throughout the first month, Indonesia's entertainment apps held the highest retention rate by D30 at 4%. As with stickiness, these figures are significantly lower than the global median (D1 20%), demonstrating once again that the INSEA region has a huge opportunity in the user-LTV space.



#### **CONCLUSION**

## App downloads continue to rise – especially home headquartered apps

Despite some dips and climbs, overall, 2023 promises to bring a number of opportunities for apps across India and Southeast Asia. Indeed, the mobile app market in INSEA is expected to experience significant growth over the next few years. From our delve into regional data, we found that, interestingly, home headquartered apps make up a large portion of the downloaded fintech apps in countries across the region. India demonstrated a particularly strong sense of loyalty to home headquartered apps, leading in share of volumes across all of the verticals we analyzed. Session lengths were healthy for all verticals, but particularly for shopping apps in Southeast Asia.

This indicates that although INSEA stickiness and retention rates were below the global median, there is high potential for app developers to keep users engaged in the first month after install. Although lower-than-average rates can be expected in the gaming hyper casual subvertical, where installs trump retention, it's clear that overall, a longer-tail approach to user acquisition within the INSEA region would be hugely beneficial to mobile marketers from a revenue perspective.

A strong interest in mobile gaming in the region is evident; the next step is attracting high-quality users. Instead of focusing solely on volume of installs, building a strategy that emphasizes user lifetime value will prove lucrative to app marketers. Attracting high LTV users can be achieved with meticulous segmentation, refined onboarding, a stellar

user experience, and a robust approach to retention. Just take a look at the revenue figures for roleplay games in Singapore! The marketers able to make the rigorous datadriven decisions needed to edge out the competition and drive the numbers up will be those equipped with the right strategy and the right tools. From data centralization to measurement, analytics, and beyond, the ability to make fast, smart choices around where to pause and where to scale is essential in 2023.



### **ADJUST**

#### **ABOUT ADJUST**

Adjust is the mobile marketing analytics platform trusted by growth-driven marketers around the world, with solutions for measuring and optimizing campaigns and protecting user data. Adjust powers thousands of apps with built-in intelligence and automation, backed by responsive global customer support.

In 2021, Adjust was acquired by AppLovin, a leading marketing software company providing developers with a powerful, integrated set of solutions to grow their mobile apps.

www.adjust.com







#### **ABOUT SENSOR TOWER**

Sensor Tower cultivates rich market insights into the trends shaping businesses in the global digital economy. Our data scientists and algorithms process trillions of aggregated data points that people contribute to us from millions of devices, making up our one-of-a-kind data estate.

We augment our customers' market understanding with industry benchmarks, leaderboards and by identifying disruptive shifts, invisible in their enterprise data. Data analysts discover opportunities for optimization through on-demand primary research in our cloud platform or their favorite data science tools. Business leaders rely on our signature reports to inform their growth strategies.

#### sensortower.com



