As smartphone penetration rates rise in mobile-first economies in Southeast Asia, the significance of Ramadan to mobile marketers has seen exponential growth; netizens increasingly turn to their phones for shopping, information or diversion and marketers are spending progressively larger portions of their budgets on this festivity.

There is no one-size-fits-all formula or timing to launch specific campaigns during and around Ramadan, as revenue and install trends have changed considerably in the past three years. Mobile marketers should base their actions on these trends as a baseline, then test and iterate their efforts throughout this period.

Executive Summary
Key Insights

1. **Indonesia still leads in app installs growth rate across verticals.**

   While all three countries in our survey scope registered material increases in average installs per app in both 2017 and 2018, Indonesia generated an almost 20% year-over-year uplift in app installs for 2018. Besides the country’s strong economic growth in 2018, smartphone penetration has been steadily on the rise, growing from 24% in 2017 to 26% in 2018.

2. **Shopping apps revenue growth changes considerably before, within and after Ramadan.**

   In 2017 and 2018, shopping apps saw growth in pre-Ramadan week revenue, with growth rates of 76% and 55% respectively. We see sharp drops in this metric the week immediately following, displaying fluctuations from period start to end.

3. **Travel apps lead in revenue growth trends.**

   When it comes to app categories, Travel apps are the ones registering the most consistent Ramadan period growth over the years. This vertical also displays the strongest revenue growth rate, together with social and messaging apps.
Shopping and Casual Gaming apps show the best retention rates.

Advertisers from Casual Gaming and Shopping apps hold the crown for highest non-organic user retention rates (3.6% and 3.8% respectively) during the Ramadan period, with Shopping apps also experiencing high retention rates for organic users (4.1%).

App purchases peak in the early hours of the morning and during lunch time.

Shopping app purchases skyrocket during Ramadan throughout Indonesia, Malaysia and Singapore. This boost is particularly pronounced from midnight after the last prayer of the day up until 5-6 am in the morning. The hours before the first prayer, in particular, see marked increases of up to 526% in shopping purchases in Indonesia. This activity peaks at 45% higher than pre-Ramadan periods, in the same country, in the hours between 11am to 2pm.
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Introduction
The holy month of Ramadan has influenced Muslims and their way of life across Southeast Asia for almost a thousand years. Over the past decade, however, this sacred time of fasting and prayer has spilled over into the digital realm, profoundly impacting how app marketers plan their mobile strategies and campaigns around this festive season.

As smartphone penetration rates rise in mobile-first economies such as Indonesia, the significance of Ramadan to mobile marketers have seen exponential growth; netizens increasingly turn to their phones for shopping, information or diversion and marketers are spending progressively larger portions of their budgets on this festivity.

The target audience in Southeast Asia is sizeable and there is much at stake- it’s imperative brands take a closer look at the latest trends and data to increase campaign effectiveness.

This report will provide readers with unique mobile app insights for the upcoming Ramadan period, analysing data within three Southeast Asian countries: Indonesia, Malaysia and Singapore. Trends and user behaviours affecting mobile app markets will be showcased across verticals, from the period preceding the festivity to the second week after its end.
We are happy to also showcase an exclusive customer spotlight with Dyah Wulandari, VP Performance Marketing at Tiket.com, one of Indonesia’s top online travel management solutions. Look out later in this report for Tiket’s best practices when it comes to conquering Ramadan.

**Data Sample**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Countries: Indonesia, Malaysia, Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile verticals</td>
<td>Mobile verticals: Entertainment, Finance, Gaming, Maps &amp; Navigation, Shopping, Social, Travel</td>
</tr>
<tr>
<td>Total installs</td>
<td>Total installs: 220 million</td>
</tr>
<tr>
<td>Total purchases</td>
<td>Total purchases: 100 million</td>
</tr>
<tr>
<td>App opens</td>
<td>App opens: 160 million (2018 Ramadan)</td>
</tr>
<tr>
<td>Social shares</td>
<td>Social shares: 120,000 (2018 Ramadan)</td>
</tr>
</tbody>
</table>
Retention data is based on a cohort of users who installed during Ramadan 2018.

In all growth metrics, the baseline is the previous time period. For example, 2018 app revenue growth trend is based on comparison with 2017 data.
Chapter 1

Key Findings
Overall Install Trends

Indonesia still leads in app installs growth rate across verticals

With the growing importance of Ramadan in Southeast Asia, mobile marketers should consider allocating more of their spend to its largest economy—Indonesia. While all three countries in our survey scope registered material increases in average installs per app in both 2017 and 2018, Indonesia generated an almost 20% year-over-year uplift in app installs for 2018. Besides the country’s strong economic growth in 2018, smartphone penetration has been steadily on the rise, growing from 24% in 2017 to 26% in 2018.

Key Findings
Dynamics of Ramadan in Southeast Asia may have slightly shifted timing-wise

Observers should also note that the dynamics of Ramadan in Southeast Asia may have slightly shifted. In 2017 and 2018, the week preceding Ramadan posted negative revenue growth in app purchases across the board, in all three countries.

In Indonesia for instance, this pre-week period registered declines of 14% and 10% in 2017 and 2018 respectively, after delivering on impressive 147% growth in 2016. Thus, while the week before Ramadan remains an incredibly important shopping period for app purchases, it may have lost some of its sheen for the majority of verticals.

This trend is consistent with the one in the last two weeks of the festivity and up to 7 days after its end, during the Hari Raya national holiday (Hari Raya Idul Fitri — Lebaran — in Indonesia and Hari Raya Aidilfitri in Malaysia and Singapore — or Eid al-Fitr).

Revenue Weekly YOY Growth - Indonesia

This trend is consistent with the one in the last two weeks of the festivity and up to 7 days after its end, during the Hari Raya national holiday (Hari Raya Idul Fitri — Lebaran — in Indonesia and Hari Raya Aidilfitri in Malaysia and Singapore — or Eid al-Fitr).
Category Trends

Shopping Key Finding

Taking a closer look at some of the categories, app revenue and retention rates differ considerably across verticals, both during and around Ramadan period, reflecting different user preferences and app usage.

Revenue weekly YOY growth - Shopping category

<table>
<thead>
<tr>
<th>Week</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Ramadan Week -1</td>
<td>43%</td>
<td>76%</td>
<td>55%</td>
</tr>
<tr>
<td>Ramadan Week 1</td>
<td>-100%</td>
<td>-94%</td>
<td>-97%</td>
</tr>
<tr>
<td>Ramadan Week 2</td>
<td>19%</td>
<td>-4%</td>
<td>-1%</td>
</tr>
<tr>
<td>Ramadan Week 3</td>
<td>28%</td>
<td>-5%</td>
<td>32%</td>
</tr>
<tr>
<td>Ramadan Week 4</td>
<td>-37%</td>
<td>-18%</td>
<td>9%</td>
</tr>
<tr>
<td>Post-Ramadan Week 1</td>
<td>52%</td>
<td>40%</td>
<td>-16%</td>
</tr>
<tr>
<td>Post-Ramadan Week 2</td>
<td>1442%</td>
<td>-50%</td>
<td>-1%</td>
</tr>
</tbody>
</table>

In 2017 and 2018, shopping apps saw growth in pre-Ramadan week revenue, with growth rates of 76% and 55% respectively. We see sharp drops in this metric the week immediately following, displaying fluctuations from period start to end.

To lessen the ebb and flow of revenue rates, marketers should prepare to run their shopping campaigns from at least 2 weeks prior to Ramadan through the end of the festivity; this enables user retention and allows the marketer to tap into unforeseen opportunities.
When it comes to app categories, Travel apps are the ones registering the most consistent Ramadan period growth over the years. This vertical also displays the strongest revenue growth rate, together with social and messaging apps. **As the Southeast Asian middle class continues to surge, travel app demand will continue to surge as consumers flock to other cities during the break.**

Travel apps also see a spike in Average Revenue Per User (ARPU) during the Ramadan period as festival observers finalize their homecoming travel plans.
Entertainment Key Finding

Revenue weekly YOY growth - Entertainment category

<table>
<thead>
<tr>
<th>Week</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Ramadan Week -1</td>
<td>-42%</td>
<td>-43%</td>
<td>21%</td>
</tr>
<tr>
<td>Ramadan Week 1</td>
<td>-17%</td>
<td>-33%</td>
<td>9%</td>
</tr>
<tr>
<td>Ramadan Week 2</td>
<td>30%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Ramadan Week 3</td>
<td>-23%</td>
<td>-55%</td>
<td>4%</td>
</tr>
<tr>
<td>Ramadan Week 4</td>
<td>1443%</td>
<td>-32%</td>
<td>18%</td>
</tr>
<tr>
<td>Post-Ramadan Week 1</td>
<td>-94%</td>
<td>-1%</td>
<td>-41%</td>
</tr>
<tr>
<td>Post-Ramadan Week 2</td>
<td>-3%</td>
<td>17%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Entertainment apps, despite weak outcomes in 2016 and 2017 in addition to a decrease in overall install rates, seem to start playing an important role for existing users throughout Ramadan period, with the exception of Hari Raya. Affordable data plans and technology have a hand in bolstering this trend, with users now purchasing and watching more online content in their Ramadan leisure time.
Finance apps do not seem to thrive during the festivity, although trends have differed considerably from 2016. In the year 2018, this category has experienced revenue growth only during Ramadan Week 3 and in the second week after its end, while 2017 saw strong growth during all four weeks of the festivity.

**Marketers within the Finance vertical should test campaigns on a week-to-week basis in order to assess results and optimize their revenue consistently throughout the period.**
Key Retention Finding

Finance app’s non-organic retention rates are also particularly depressed during this time, registering at 19.8% retention after Day 1 and 1.4% after 30 days.

Advertisers from Casual Gaming and Shopping apps hold the crown for highest non-organic user retention rates (3.6% and 3.8% respectively) during the Ramadan period, with Shopping apps also experiencing high retention rates for organic users (4.1%). Retention rates are usually positively correlated with simple user onboarding, incentives, updates and personalisation.

It’s pertinent to place focus on providing seamless UX experiences, rewarding users and listening to community feedback.
Chapter 2

Customer Spotlight

with Dyah Wulandari, VP Performance Marketing at Tiket.com
Dyah Wulandari is a digital specialist with more than 12 years professional experience in the Technology and Digital Marketing field.

With this background, she has mainly helped top Classified, e-Commerce, Travel and Finance players in SEA to grow their business. She's been working with B2B and B2C clients across the Indonesian market.
How has your approach during Ramadan evolved over the past few years? Can you talk about any new trends in marketing you’ve noticed during Ramadan?

Ramadan has always played a special role in our market, Indonesia. Travel expenses follow a positive growth trajectory during this particular season. In the past couple of years, Ramadan always comes together with school holidays, hence the duration of the “day-off” is getting longer.

It’s an exciting moment for us because our users take longer time to choose their holiday destination, which creates huge opportunities for us to influence their decisions during the consideration phase.

For example, before making a booking, our users tend to plan their holiday by consuming different types of “inspirational” content such as things to do, culinary selections, trending hotels, etc. In addition to that, we use internal signals from our users to understand their preferences. As a travel platform, we cater to their needs from the trip planning stages through to when they come back.
What drives your users and prospects during Ramadan? Does Ramadan offer any opportunities to app marketers that are not available during the rest of the year?

The biggest opportunity comes from the increment in purchasing power. Our users get additional disposable income from the 13th salary, or as we call it, THR. The general population usually receives this salary boost 2 weeks before Eid, which provides them with additional income to purchase flight tickets, train tickets, rent a car or accommodation for "Pulang Kampung".

In addition to travel expenses, they tend to spend their disposable income for new clothes, gadgets, or even buy a new car. With the massive transactions during this festive time, the industry try their best to capture the opportunity as much as possible. This is only happens once a year, a huge spike should be expected during this seasonality.

1 The 13th Salary (THR) in Indonesia is also known as the religious holiday allowance. Following the law, permanent employees must receive financial support once a year for their longest religious festivities. THR comes during the big Islamic holiday of Eid-al-Fitr.

2 Pulang Kampung is an Indonesian term for the activity where workers living outside of their hometown return to their families during or before major holidays, especially Eid-al-Fitr.
Is it important to localize your Ramadan messaging? What are some of the ways in which you localize for each market?

Our focus market is Indonesia, hence we categorize our languages into three: Bahasa Indonesia, English and Local Language. Local language can be a mother tongue e.g. javanese, sundanese, balinesese etc, and we find that is one of the humble ways to talk to our users.

Localization in our terms does not only refer to the local user interface, but also covers marketing content. When Indonesia consists of multiple local languages /mother tongues, and Ramadan period is when people want to be closer to their families.

For those who want to go "Pulang Kampung" to their hometown, we personalize our communication using their local terms eg. in Sundanese, Javanese, Balinese, etc. In the end, we want to engage our users and be perceived as a brand that is fun and close to the local users.”

What changes have you perceived in the online/app behavior of your target audience during Ramadan?

In the past, users spent heavily on gadgets, cars and clothing. Right now, travel has become the main priority, especially for vacation travelers.
Chapter 3

Ramadan: A Day in the Life
To campaign more effectively during Ramadan, app marketers should take the opportunity to secure a better understanding of the context and activity for each time in the day, whether it's rising for pre-dawn Sahur, fasting through the lunch hours or winding down after buka puasa.

With this in mind, we've broken down our study findings into five distinct periods during the Ramadan day, to afford readers a closer look at the daily app purchasing habits during the festivity. We hope this will provide a better understanding of what messages should be used for each period in the day and when ad spends could potentially be most effective:

**3am to 6am**

**The Ramadan day begins when users rise for their pre-dawn meal, Sahur.**

**Social sharing:**
- Social shares peak between 3-5am in Indonesia and Malaysia.
- Purchases on social apps happen mostly before the daily first prayer, with the largest spike of 164% in Indonesia.
- App opens are approximately two times that of pre-Ramadan and post-Ramadan periods in the same time.

**Entertainment:**
App purchases in Indonesia spike aggressively between 3am-4am at 540%.

**Shopping:**
App purchases skyrocket from 12am to 5-6am, while best time for shopping is between 4am and 5am.
6am to 9am
After morning prayer, users turn their thoughts to the day ahead.

Social:
Social shares during these morning hours are still double that of the pre-Ramadan period in Indonesia.

Entertainment:
Netizens in Malaysia and Singapore tend to increase entertainment app purchases throughout the day.

Mobile Gaming:
In-app purchases for casual games peak between 6am to 7am. Game purchases during these hours also skyrocket after Ramadan.
11am to 3pm
During their lunch breaks, users look for ways to distract themselves from their hunger pangs.

App opens between 1-3pm is slightly lower than that of the pre-Ramadan and post-Ramadan periods.

**Shopping:**
Lunch is considered the second-highest shopping peak period (third-highest in Indonesia)

**Travel:**
Purchases see second peak during this time in Indonesia

**Social:**
Second-highest peak of the day during lunchtime across all three countries, low social shares.
4pm to 8pm
Muslims end their workdays early to head home and prepare for buka puasa.

During these times, there are fewer overall social shares, app purchases and app opens.

Maps & Navigation:
Mobile app users in Malaysia record spikes in maps & navigation app purchases of up to 289% during this time frame.

8pm to midnight
Muslims wind down their evening after buka puasa.

Social sharing rates are generally the lowest during these times

Gaming:
Indonesians and Malaysians both make more in-app purchases for mobile games in the evenings

Shopping:
Indonesians spend up to 63% more on shopping in the evenings than the pre-Ramadan period

Entertainment:
Entertainment app spending peaks between 8pm - 10pm in Malaysia and Singapore. Indonesians, instead, tend to spend less on entertainment apps during the evenings.
Chapter 4

Conclusion
Ramadan has become an increasingly critical time of the year for mobile marketers to get right. This is partly due to the growing app consumption habits among Southeast Asians, as well as the digitalization trend that's rippling through these economies, which may improve prospects for mobile payment apps, for instance.

**Therefore, marketers should remain sensitive to the needs of their target audience in the weeks leading up to Ramadan, Ramadan itself, as well the weeks following it, to fix on the optimal week to roll out their campaigns.**

The time of day in which messages are delivered is also critical—mobile users may not be in the mood to shop, for instance, in the early evenings when they may be worshipping, preparing food or stuck in traffic. Content and context, as always, is key for effective campaigning during the holy month.
Here are the top five findings from our report, which will be useful for mobile marketers as a projection for 2019 app marketing strategies, based on data from the previous years:

Marketers might consider allocating more of their Ramadan campaign budget spend to Indonesia, as the largest economy in Southeast Asia has been a top performer over the past few years.

There is no one-size-fits-all formula or timing to launch specific campaigns during and around Ramadan, as revenue and install trends have changed considerably in the past three years. Mobile marketers should base their actions on these trends as a baseline, then test and iterate their efforts throughout this period.

Travel and social apps have the fastest-growing revenue rates during Ramadan. Finance leads in installs growth, while Shopping and Maps & Navigation apps have the highest retention rates.

For most app categories, the hours between 3am to 6am before Sahur are when Festival observers tend to be most active online and make the most app purchases. Other peak periods include lunch hours and evenings, after buka puasa.

After observers leave work from 4pm to 8pm, they register fewer online and app activities during Ramadan, compared with other times in the year. During these hours, many consumers are commuting in traffic or preparing for buka puasa. The one exception are Maps & Navigations apps, particularly in Malaysia.
About AppsFlyer

AppsFlyer's technology is found on 98 percent of the world's smartphones, making it the global leader in mobile attribution and marketing analytics.

Data-driven marketers trust AppsFlyer for independent measurement solutions and innovative tools to grow and protect their mobile business.

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