

The State of Mobile in Vietnam

Tony Wilcox Director of Agency Alliances - APAC

HCMC - June 6th





100%

Independent & Unbiased

\$19B

Ad Spend Measured 4,600+

Integrated **Partners**



Mobile Actions Measured Per Month 85k+

Applications























































- 1. 2019 Vietnam Insights and Benchmarks
 - Focus: E-commerce
- 2. Mobile Ad Fraud: A High Stakes Arms Race in Vietnam





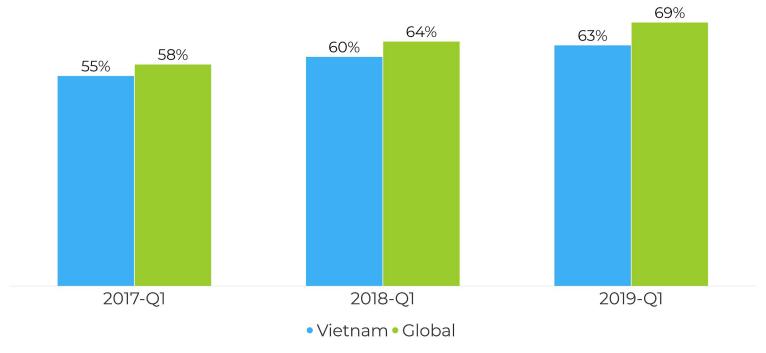


Chapter 1.

2019 Vietnam Insights and Benchmarks



YoY Growth in Share of Non-organic Installs





CPI Trend By Platform



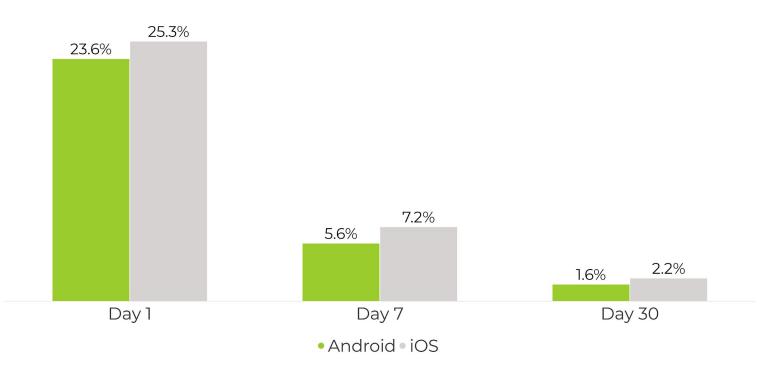


CPI Trend By Category



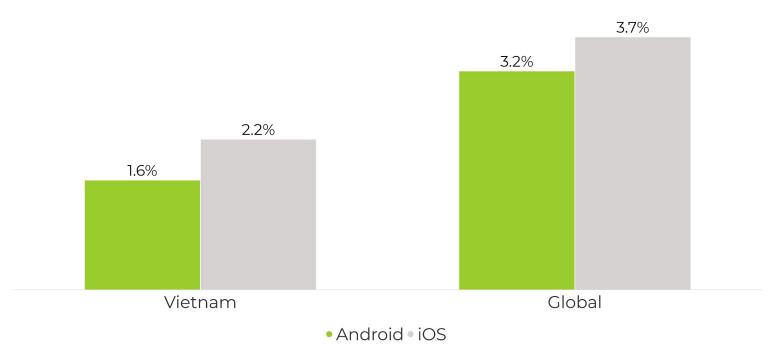


Retention Rate by Platform



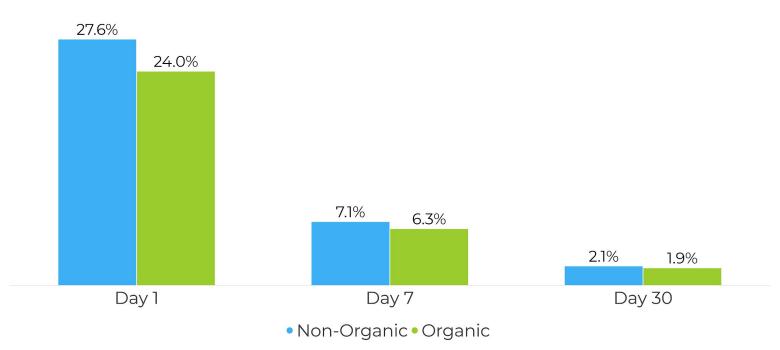


Day 30 Retention Rate by Platform



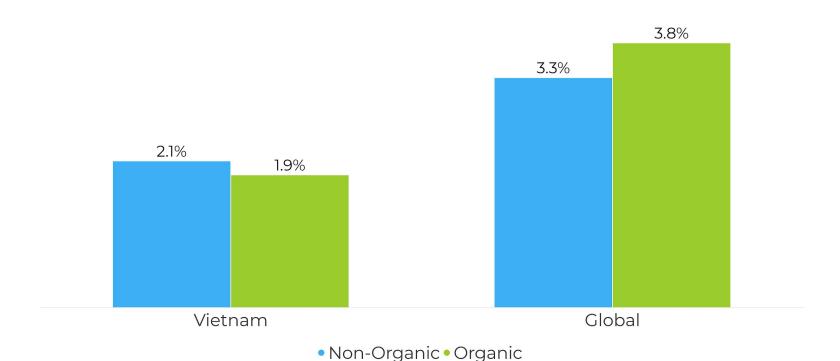


Retention Rate by Type





Day 30 Retention Rate by Type





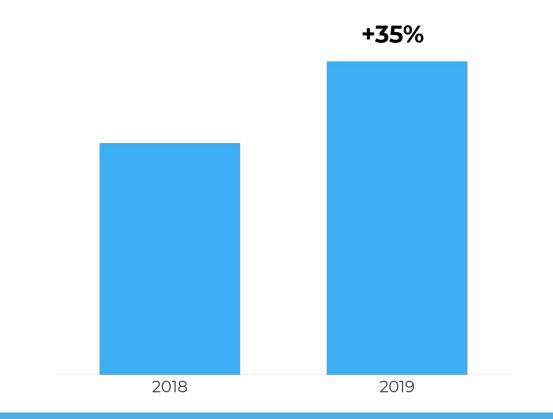


Focus: E-commerce



E-commerce Retargeting Conversions

Q1 2019



E-commerce Retargeting Conversions

Among apps which had retargeting in 2018 and 2019

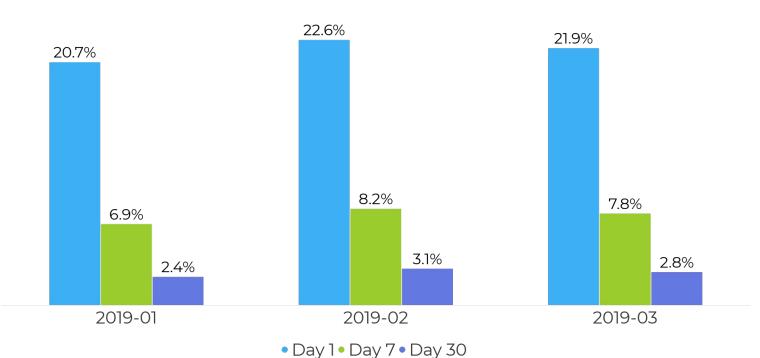
57%

had increased their retargeting conversions



E-commerce Retention Rates

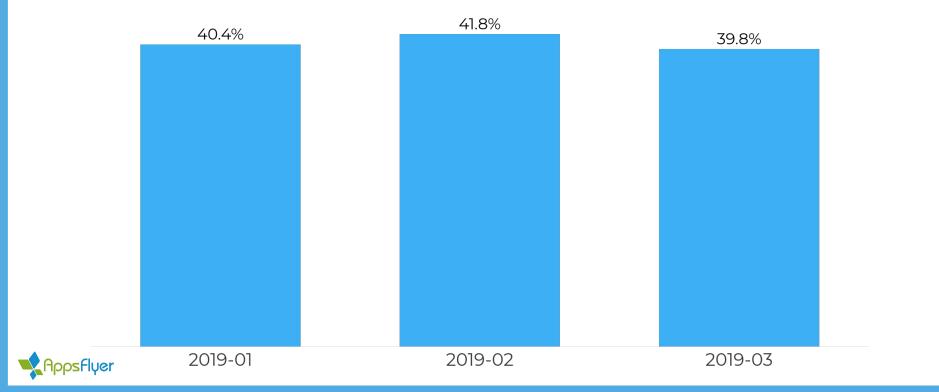
Q1 2019





E-commerce Uninstall Rates

Q1 2019





Chapter 2.

Mobile Ad Fraud
A High Stakes
Arms Race in
Vietnam



AppsFlyer prevents

\$6.7M
worth of fraudulent installs/day



Massive Increase in Financial Exposure

Estimated Global Fraud Exposure Mobile App Marketing (Q1 2019)

\$450 - \$550 MILLION





...Even in SEA

Estimated SEA Fraud Exposure Mobile App Marketing (Q1 2019)

\$260 MILLION





The Impact of Mobile Fraud

Fraud is Expensive

23% OF GLOBAL MOBILE MEDIA SPEND WASTED ON

FRAUD

Fraud is Pervasive

30% YEAR-OVER YEAR GROWTH IN COST OF MOBILE FRAUD ATTACKS

Fraud is Evolving

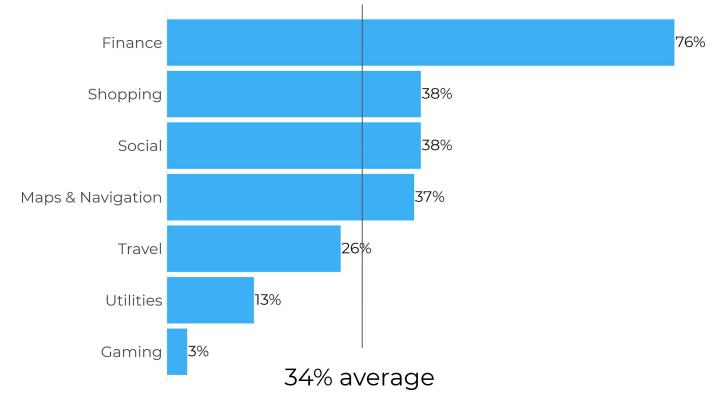
OF FRAUD IS PERPETRATED BY SOPHISTICATED AND SCALABLE FRAUD TACTICS





74%

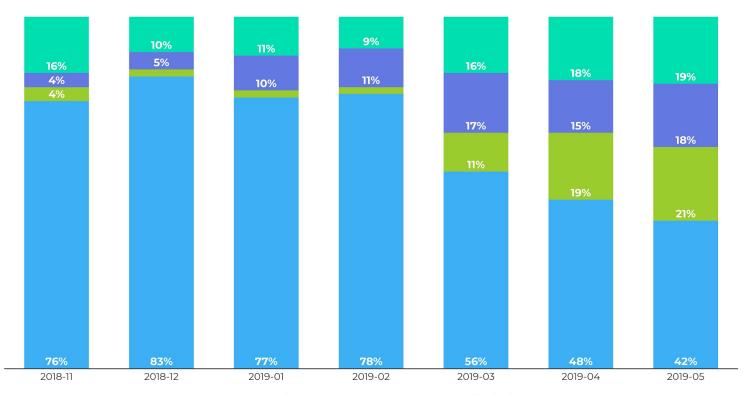
The not-so-secret fraud issue in Vietnam





Source: AppsFlyer 2019, May 2019

Fraud is evolving





Bots • Device Farms • Click Flooding • Install Hijacking

Source: AppsFlyer 2019

What Fraud does to your business



Skews your App data



Eats your legitimate installs



The Bleeding Cash Cycle



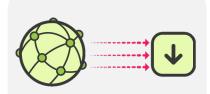


2 Main Types of Mobile Fraud

Attribution Hijacking



Activity Driven



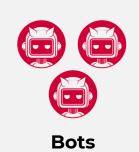
Click Flooding

Spray and Pray

Fake Installs



Device Farms



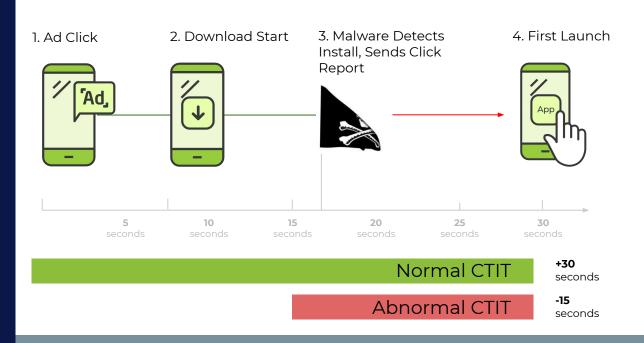


Install Hijacking

HOW IT WORKS

Install hijacking is a type of fraud where fraudsters "hijack" credit for an install.

Common techniques include sending false click reports or injecting false referrer data.



PROTECTION

Needs to use multiple signals including short CTIT, referrer mismatching, and multi-touch distribution patterns to identify and block install hijacking in real-time.

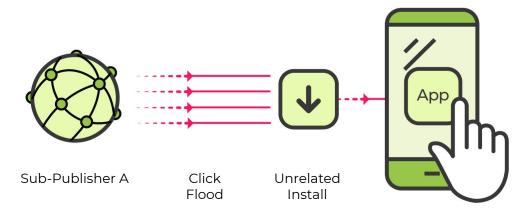


Click Flooding

HOW IT WORKS

In click flooding, fraudsters send a "flood" of false click reports from, or on behalf of real devices.

When the actual device downloads the app, the sub-publisher is falsely credited with the install.



Sub-Publisher A Is attributed

PROTECTION

Needs to use signals including click-to-install time (CTIT), conversion rates and multi-touch contribution rates to identify and block click flooding at its source, in real-time.



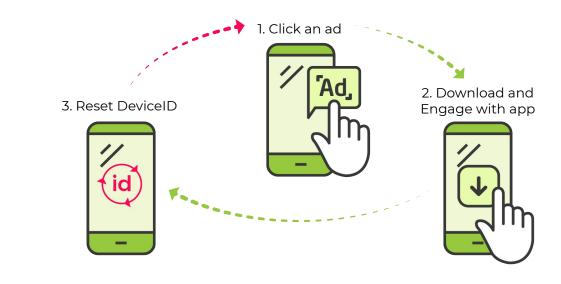
Device Farms

HOW IT WORKS

Device farms are locations full of actual mobile devices clicking on real ads and downloading real apps, hiding behind fresh IP addresses.

Over 2017, fraudsters started regularly resetting their DeviceIDs to avoid detection.





PROTECTION

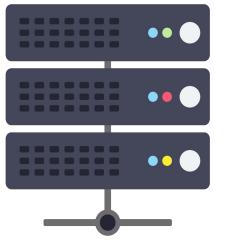
Needs to maintain active ratings for over 8.4 billion devices, automatically blocking device farms. Sub-publishers trafficking concentrations of devices "new" to the database are blocked in real-time.



Bots HOW IT WORKS

Bots are malicious code that run a set program or action. While bots can be based on real phones, most bots are server-based.

Bots aim to send clicks, installs and in-app events for installs that never truly occurred.



1. Simulated Ad Click



2. Simulated First-Launch Report



3. Simulated In-App Event Reports



PROTECTION

AppsFlyer's unique data scale is able to identify both highly targeted and widely distributed bots operating at both lower and higher volumes, blocking bots in real-time



Bots are becoming smarter





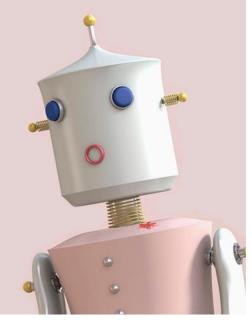
A simple bot recipe, part 1

Prep time: 1 day

Cooking time: Usually 30-60 days

Ingredients:

- » 1 Server
- » 1 Attribution SDK, preferably open sourced
- » 1 Anonymous IP package from the Darknet
- » 1+ Ad network publisher accounts
- » An abundance of device IDs





A simple bot recipe, part 2



Fraud prevention evolved

Fraud is more sophisticated and fraudsters often have multilayered methods, requiring a multilayered approach to effectively fight it



Device-level insights at scale



Comprehensive in-app event measurement



Machine-learning powered behavioral analysis



Layers of protection



Detecting fraud takes scale



\$19 billion

Annual media spend measured

12 trillion

Annual in-app events measured

8.4 billion

Mobile devices carry AppsFlyer technology



Protecting Your Business



30% Ad Spend Saved 1,000 Man Hours Saved Annually 20% Lift in ROI 25% User Base Growth

"AppsFlyer's anti-fraud solution, Protect360, saves our team a lot of time and delivers comprehensive mobile fraud protection, no matter the type."

Dyah Wulandari, VP Performance Marketing









