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Mobile Monetization
Scenario Design & Big Data

Arther Wu
Senior Director of Monetization and Business Operation

Agenda

Quick update of Cheetah Mobile

Ad Scenario Design

Big Data / Relation with Advertising

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#1
Publisher
of Mobile Tool Apps in GP
#2
Publisher
of Mobile Apps in GP Worldwide
1.6B
Users
~500M
MAU

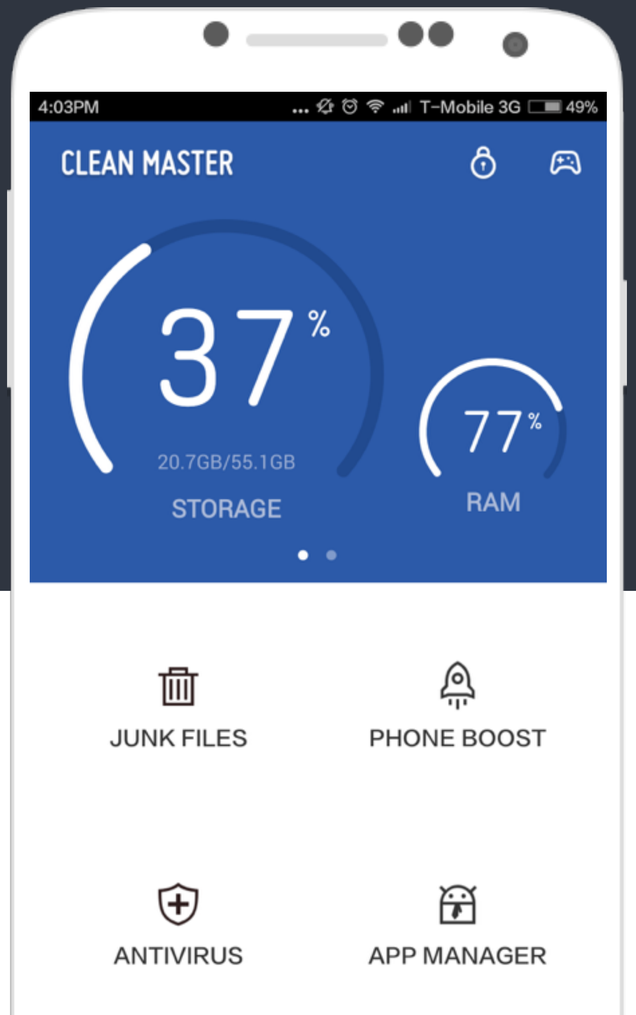
CLEAN MASTER

600+M
downloads

60+
countries

No.1
Android
tool app

4.7
rank
★★★★★



Junk Files

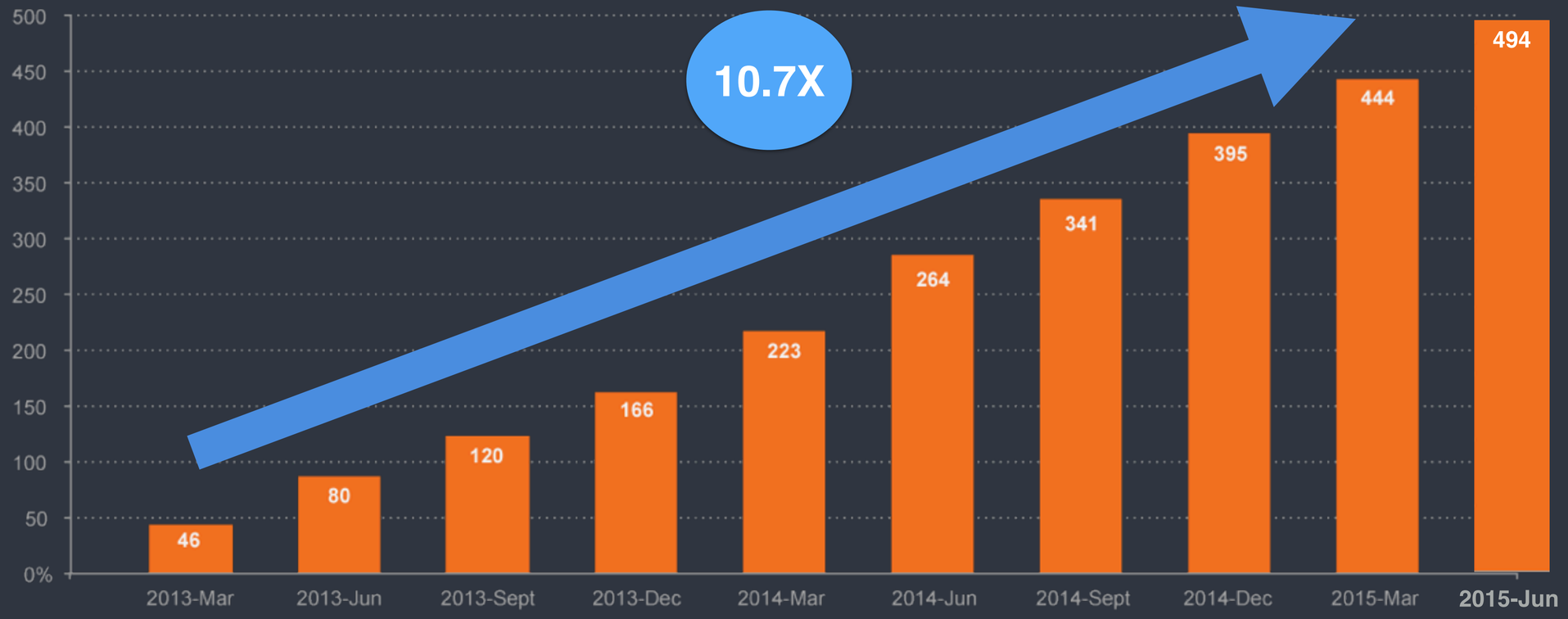
Anti-virus

Phone Boost

App Manager

Rapid Growth of Global Mobile User Base

Mobile MAU
MM



GLOBAL FOOTPRINT

~71% Mobile MAU Overseas [1]

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Global Presence for Advertisers

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Mobile Monetization

In-app Purchase

Advertising

Paid Download

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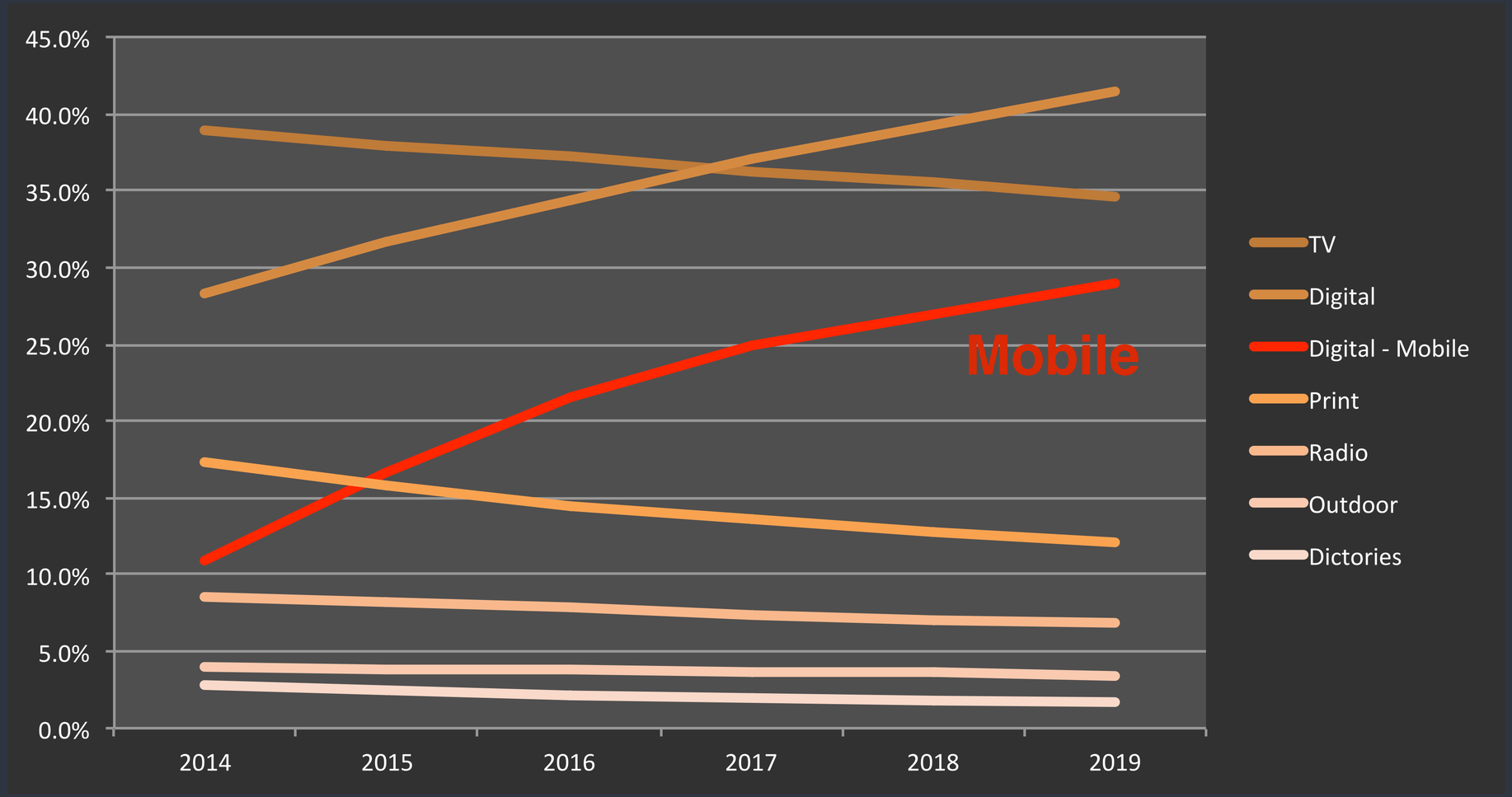
US Total Media Ad Spending Share, by Media 2014 - 2019



Resource: eMarketer 2015 Sep

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Mobile Advertising Ecosystem

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CM Cloud Data
Demand
Supply
Advertisers Ad Network
ad platform
Cheetah Apps
Advertiser
Publisher
cheetahmobile

ad platform

Cheetah Mobile's Strength on Mobile Advertising

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How Does Cheetah Mobile Ensure Ads Performance

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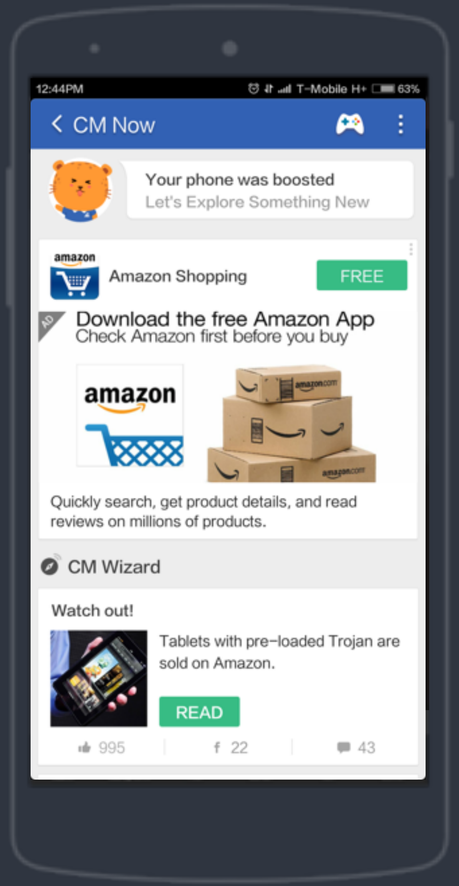
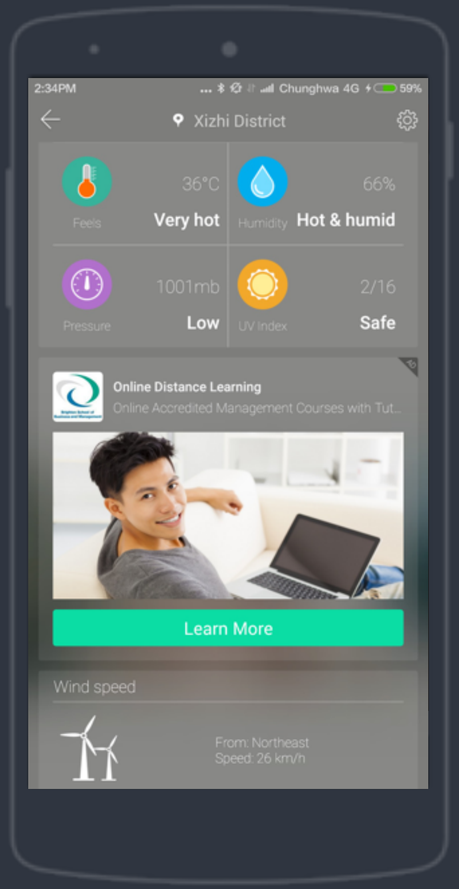
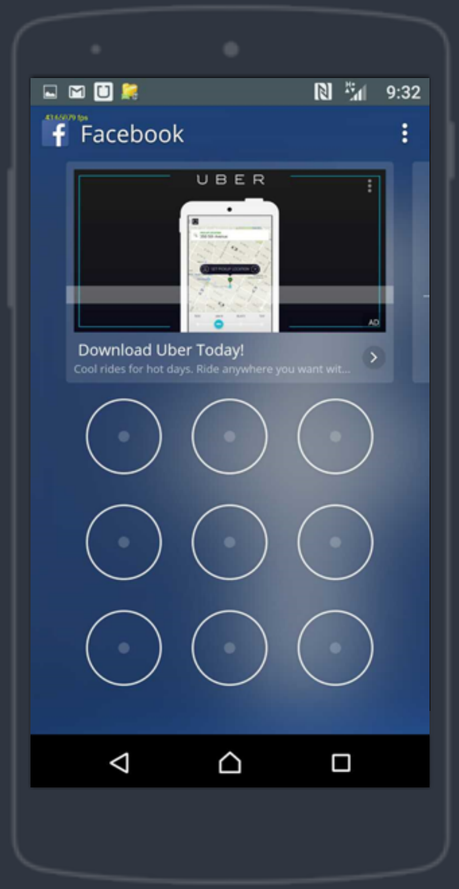
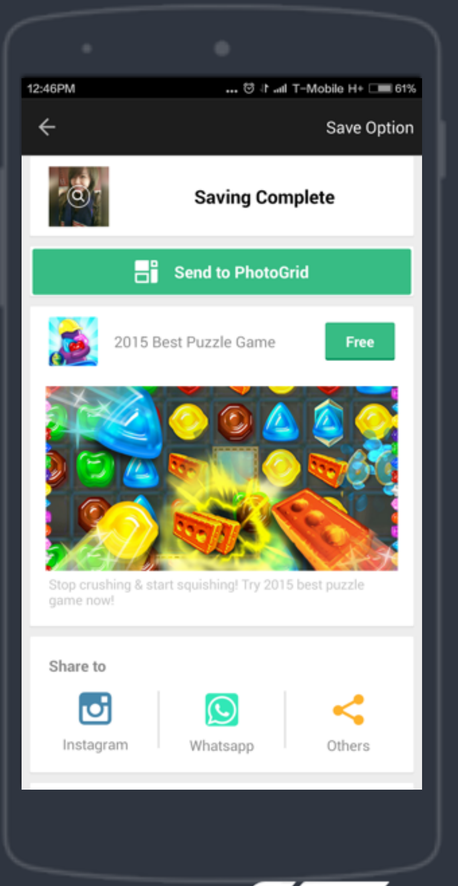
Multiple Ad Formats in Cheetah Apps









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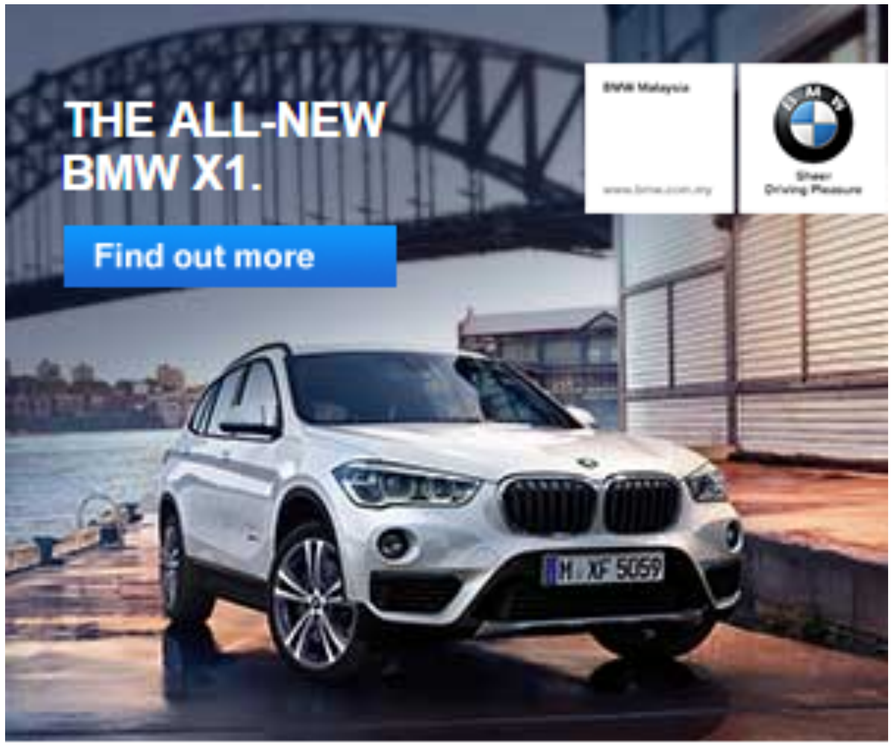
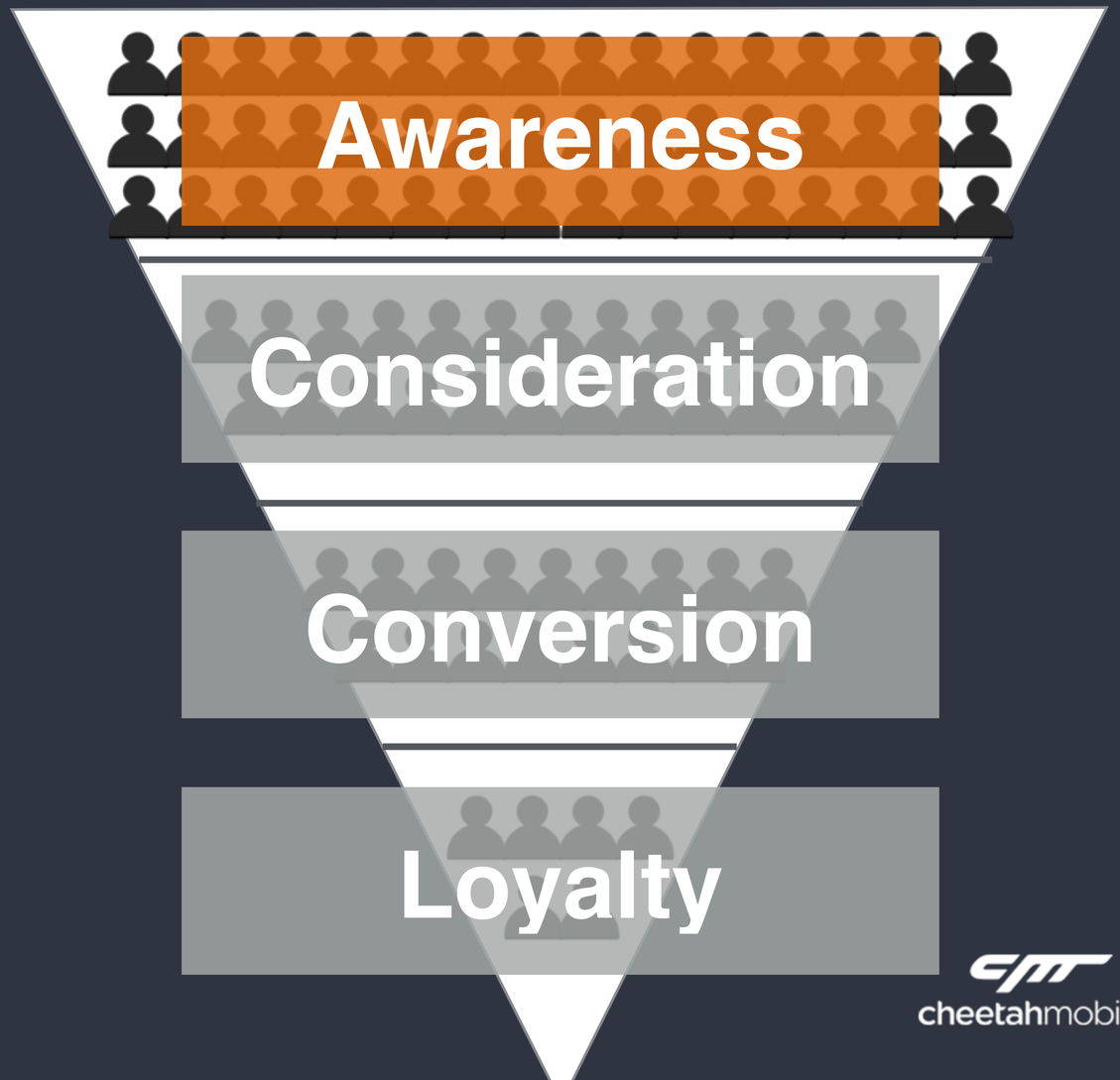
Cheetah Ads Satisfy Marketing Objectives

Cheetah Ads



CPM / Branding

Advertisers' objectives



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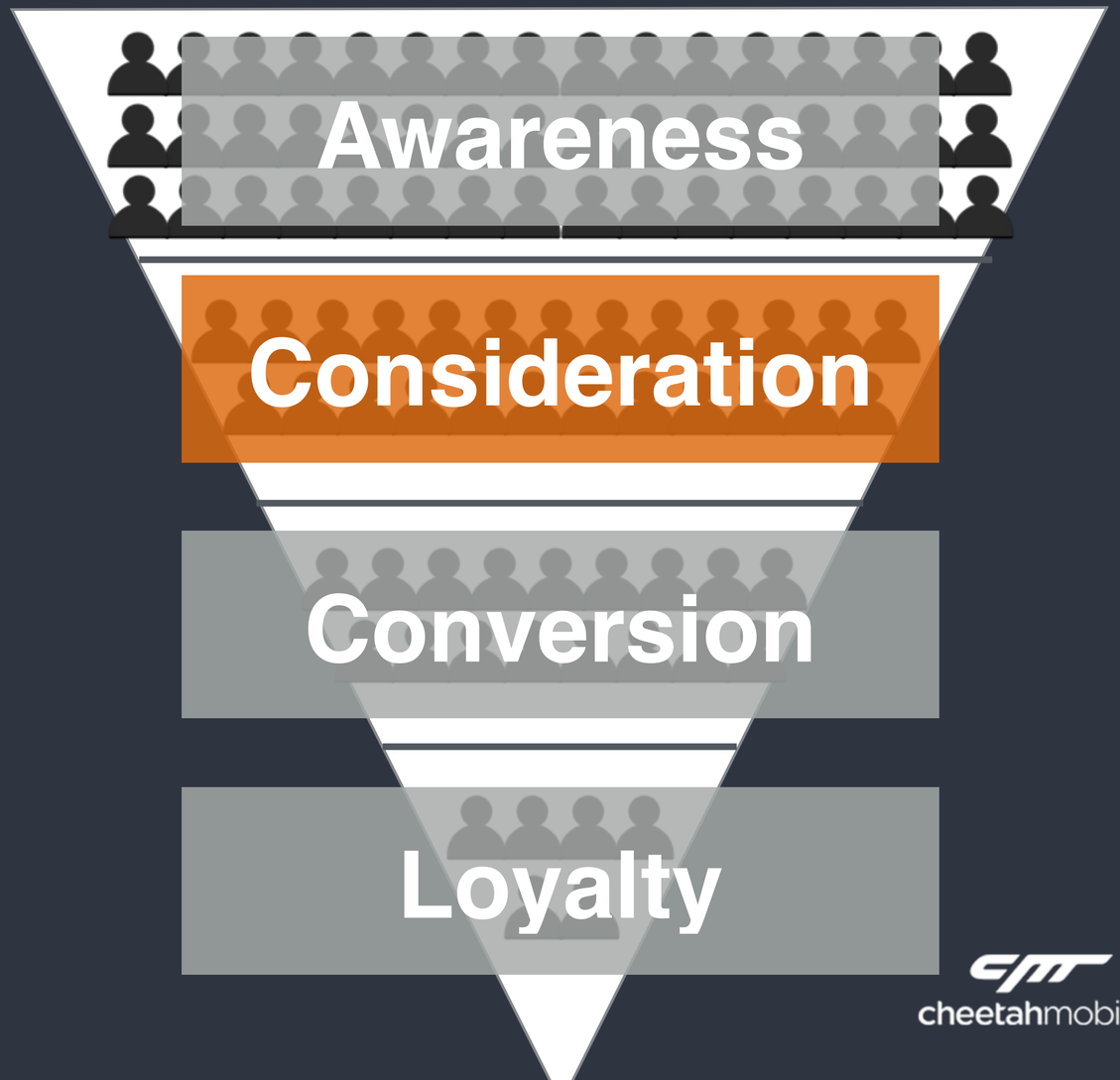
Cheetah Ads Satisfy Marketing Objectives

Cheetah Ads

CPC / Brand Cognition

Advertisers' objectives



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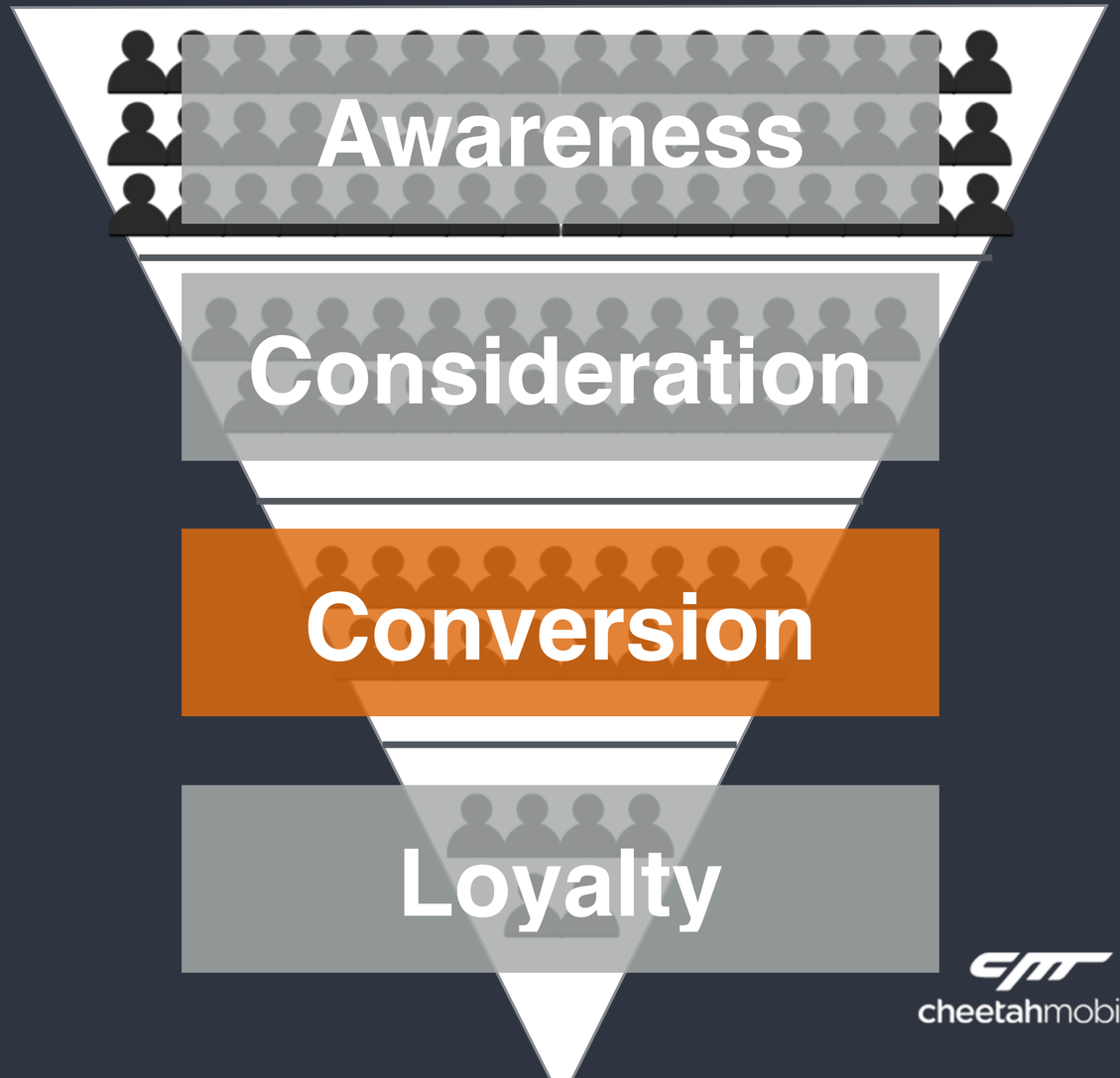
Cheetah Ads Satisfy Marketing Objectives

Cheetah Ads

CPS / Customer Willingness

Advertisers' objectives



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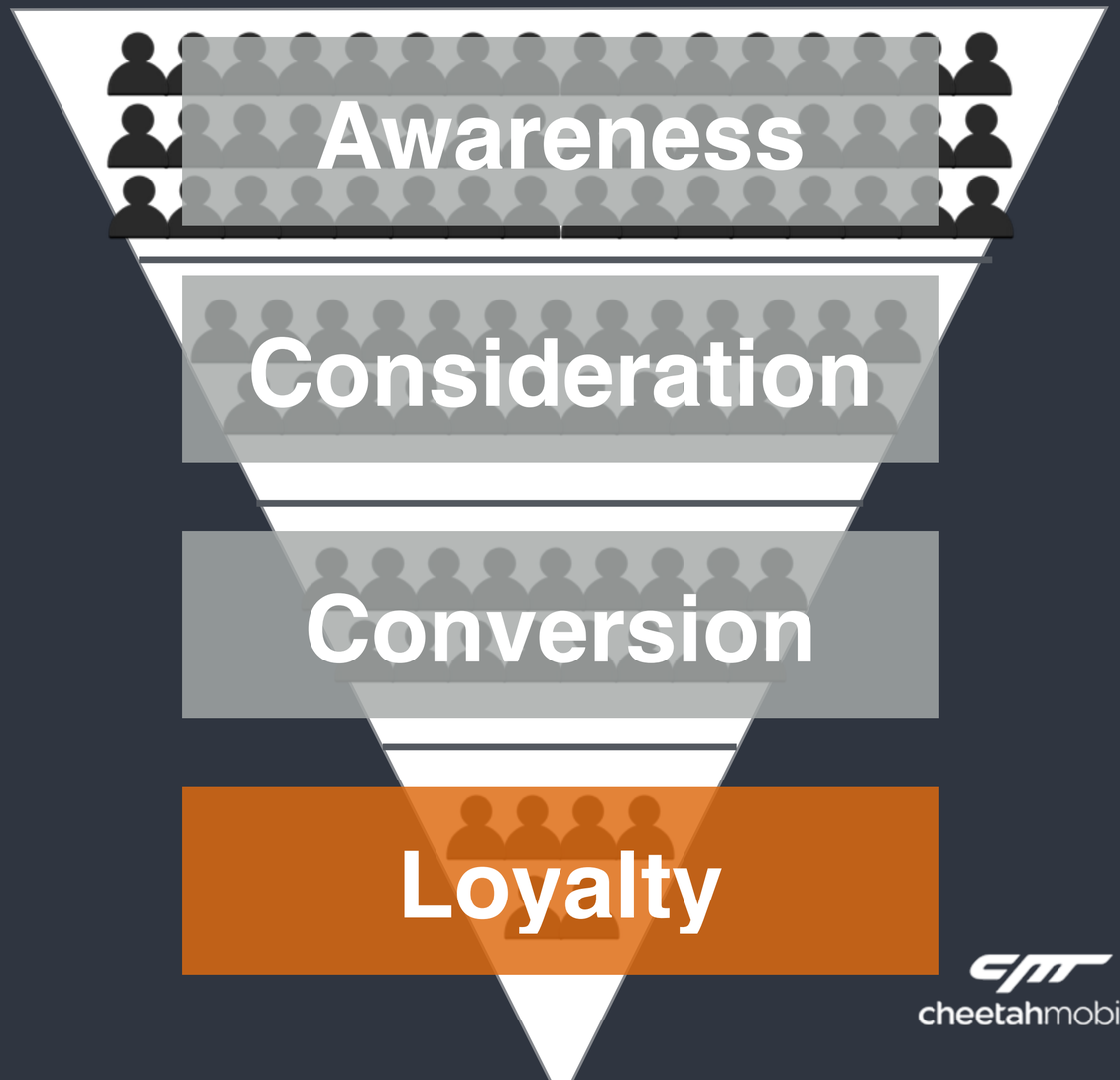
Cheetah Ads Satisfy Marketing Objectives

Cheetah Ads

CPA / Customer Loyalty, Retention

Advertisers' objectives



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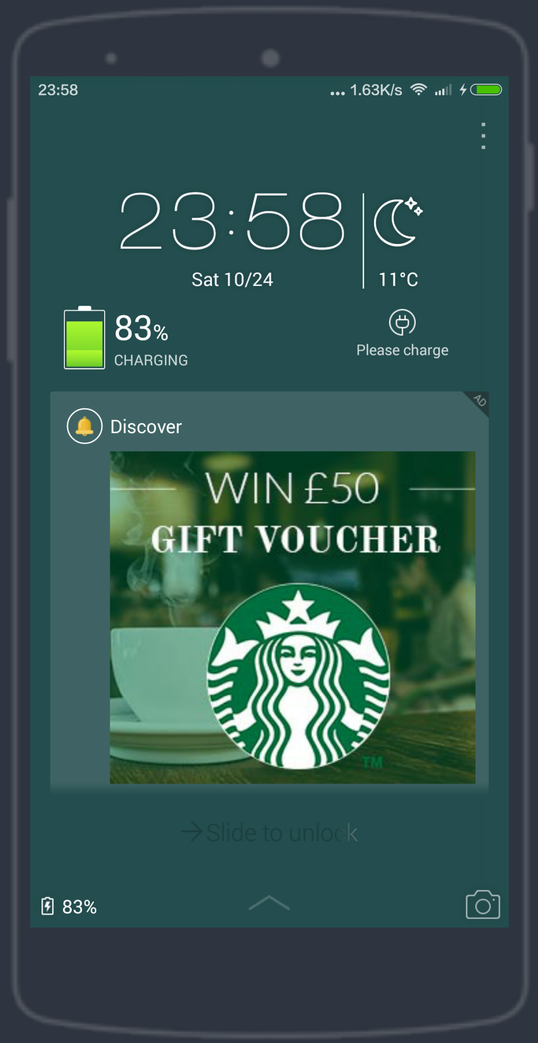
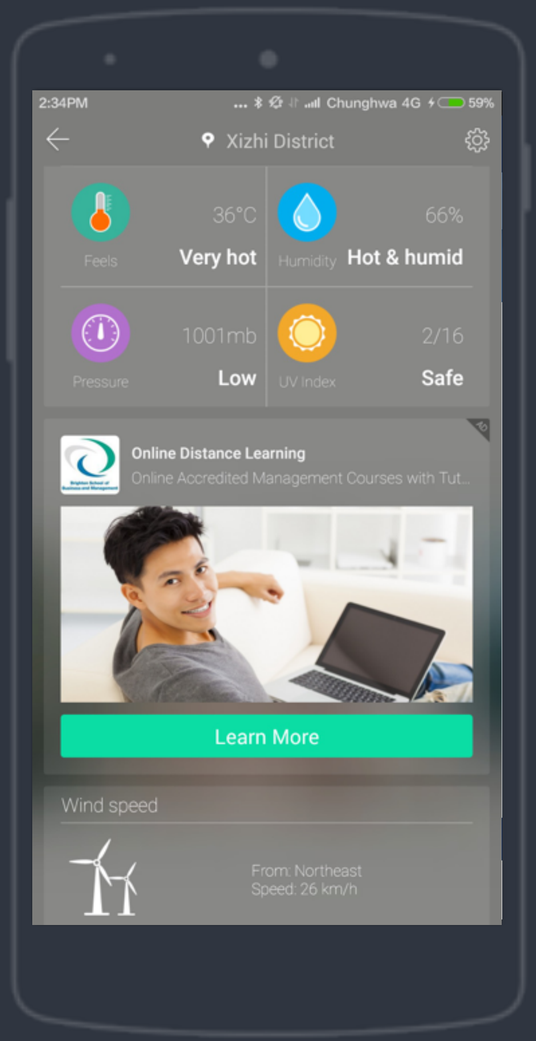
Users’ daily life cycle



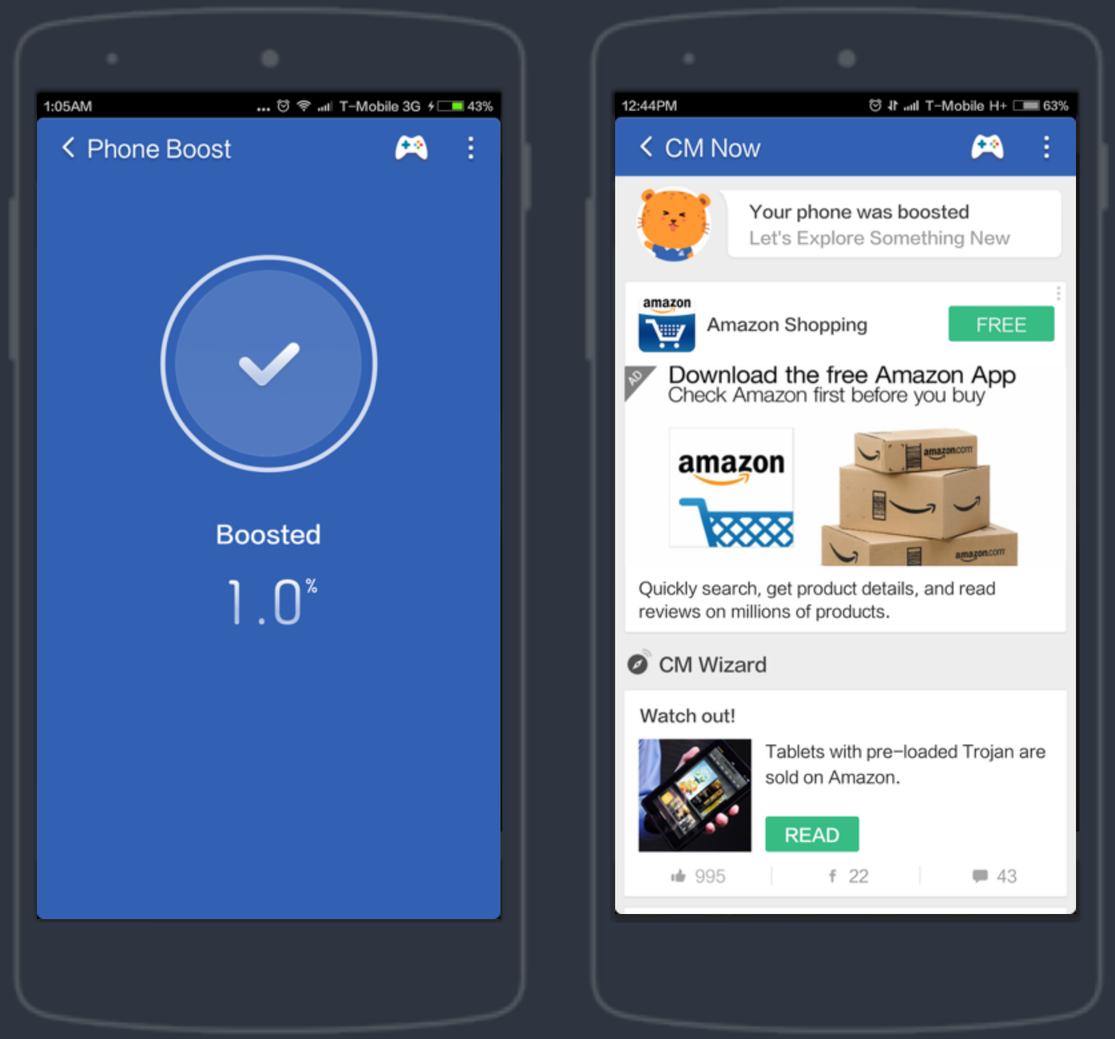
CM Locker: Charging screen

Users’ daily life cycle



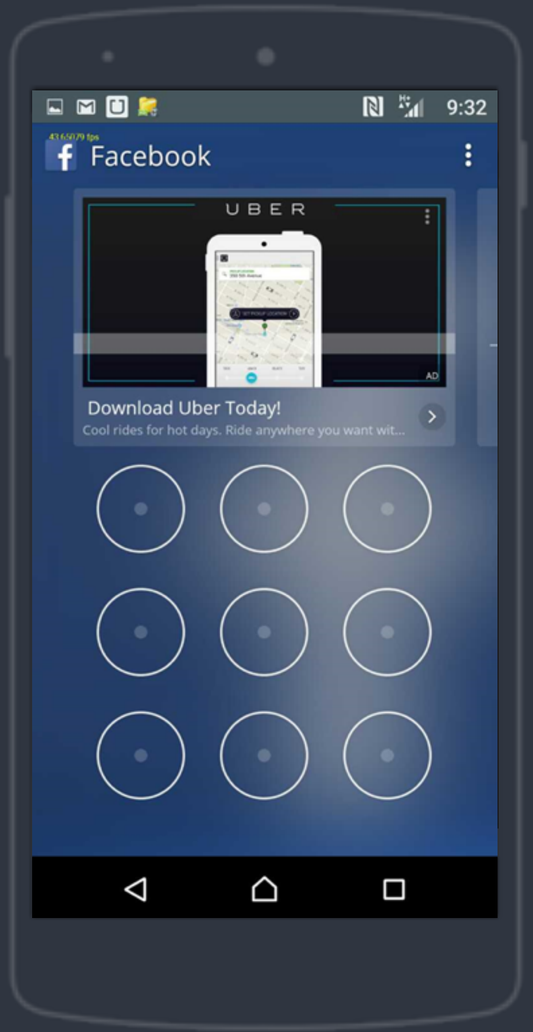
CM Locker: Weather flow

Users’ daily life cycle



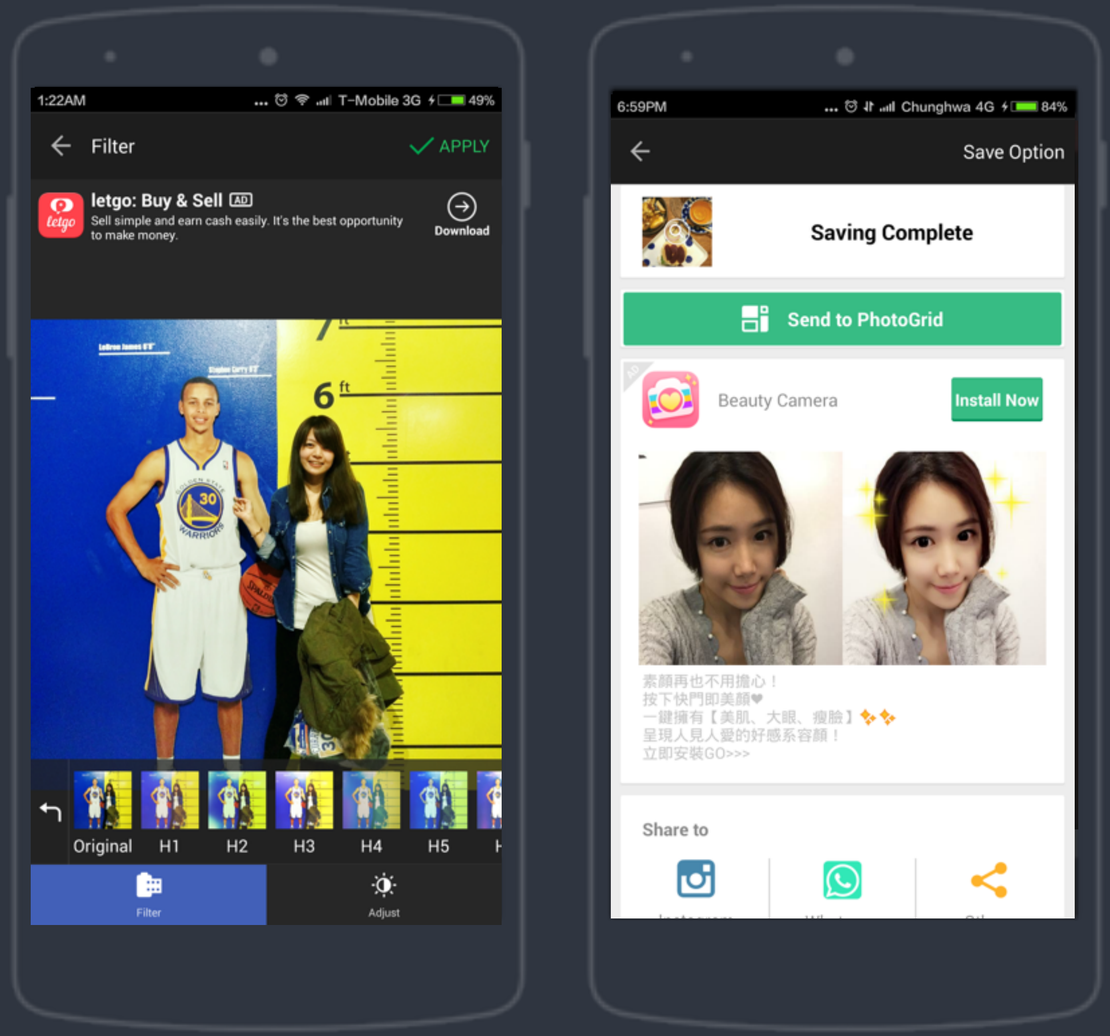
Clean Master: Phone boost result page

Users’ daily life cycle



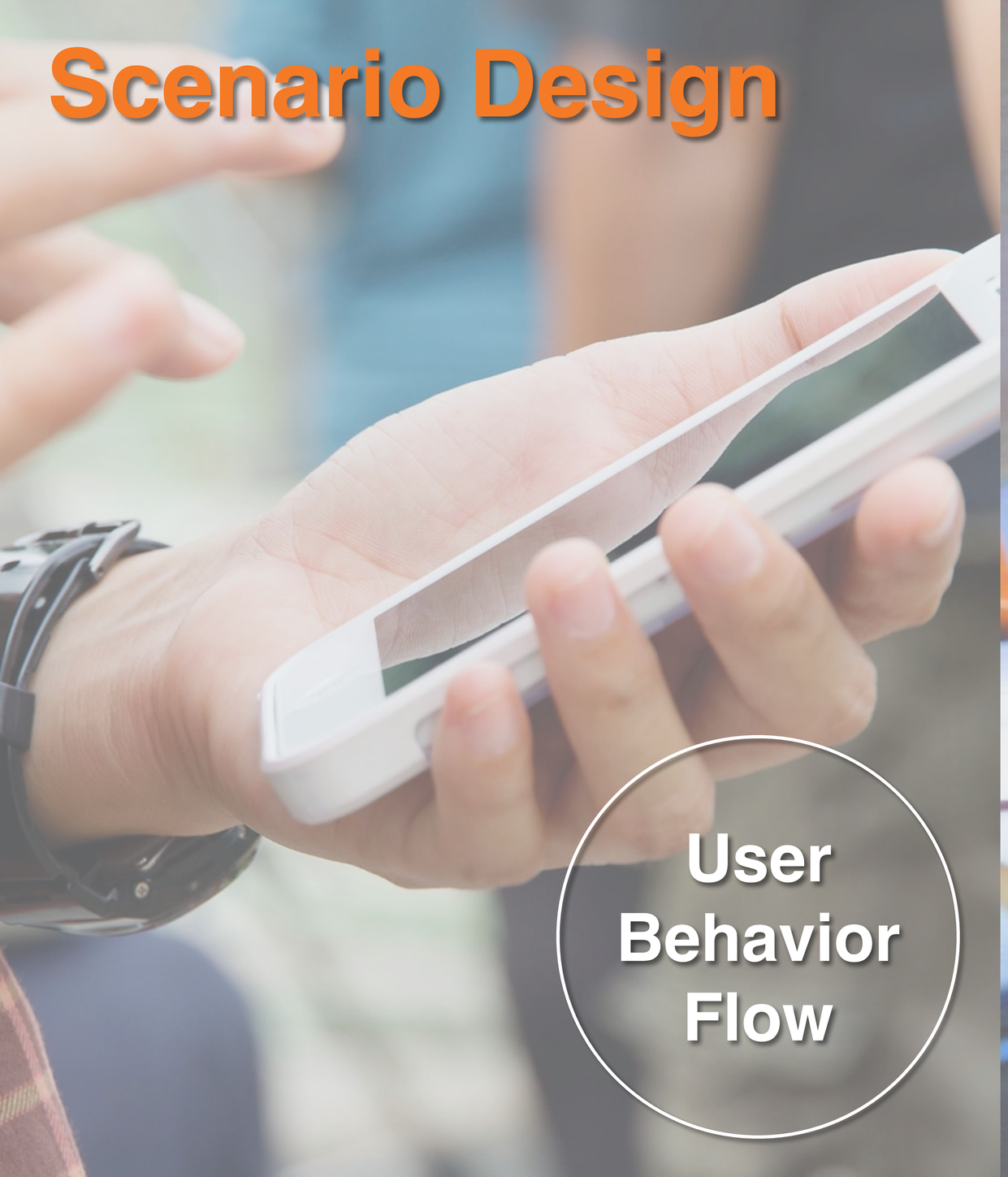
CM Security: AppLock

Users’ daily life cycle

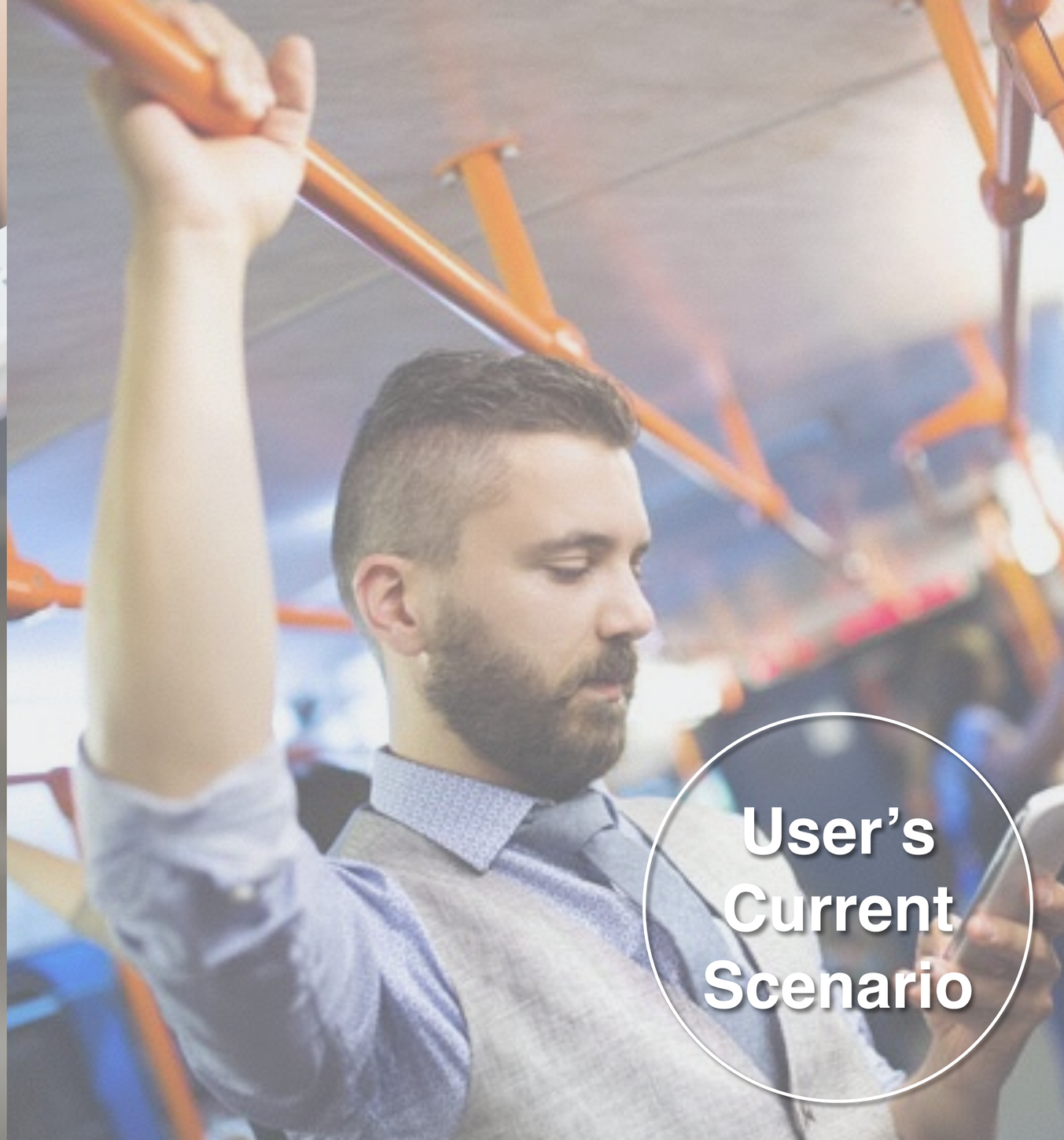


PhotoGrid: Result page

Scenario Design



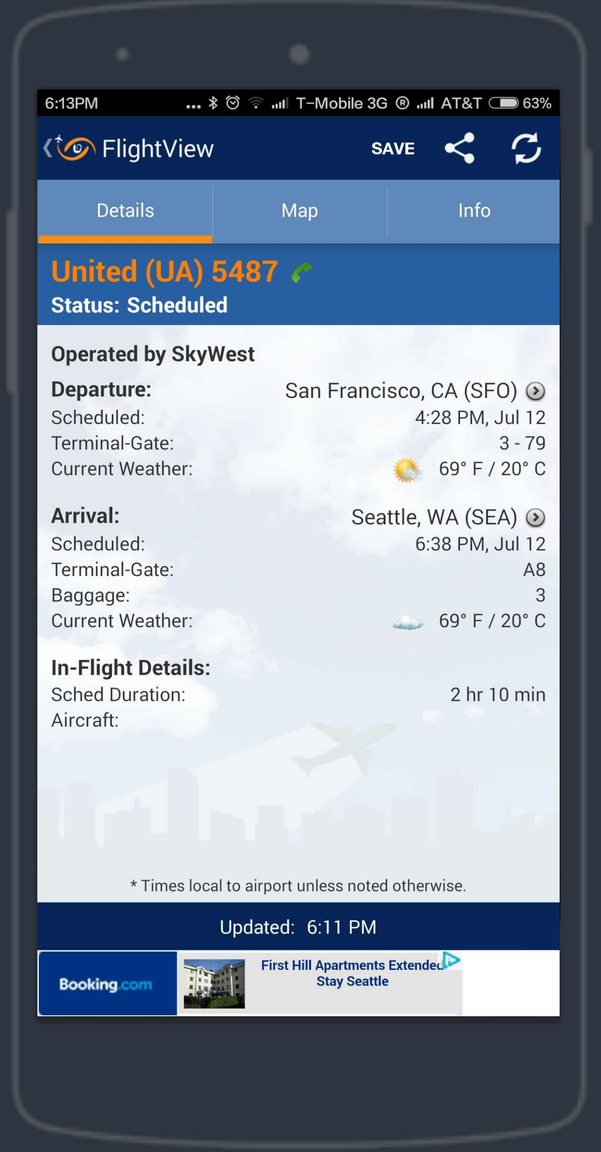
User Behavior Flow



User's Current Scenario

Relevant Information
User's scenario

Flight Search → Hotel Info



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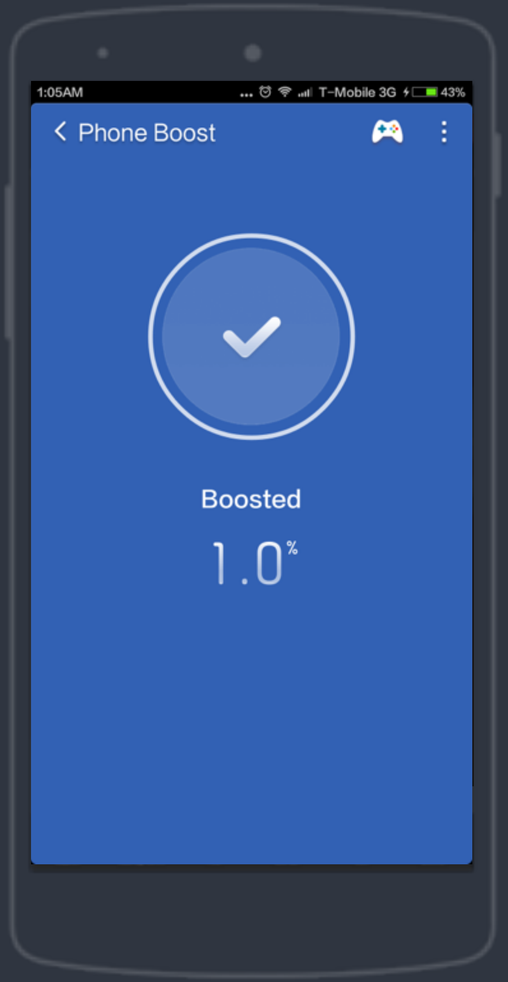
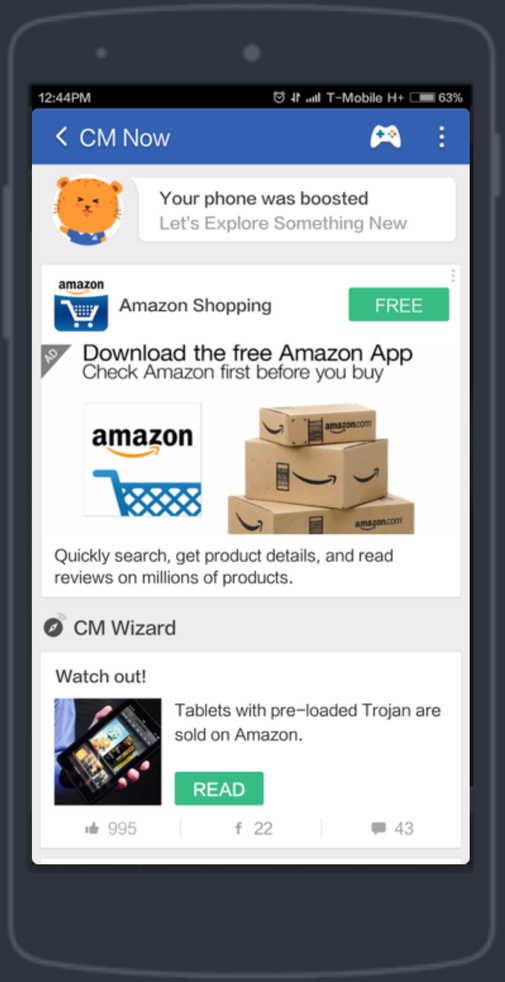
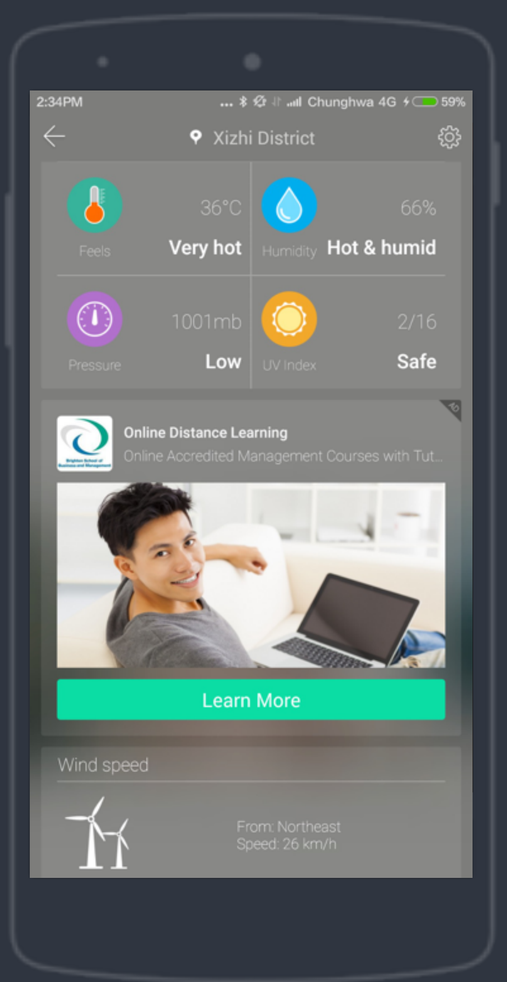
User Engagement
Non-intrusive Placement





Clean Master: Phone boost result



CM Locker's info page

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Longer Time on Page

Non-interruptive Placement

User Engagement

CM Launcher's News ballon

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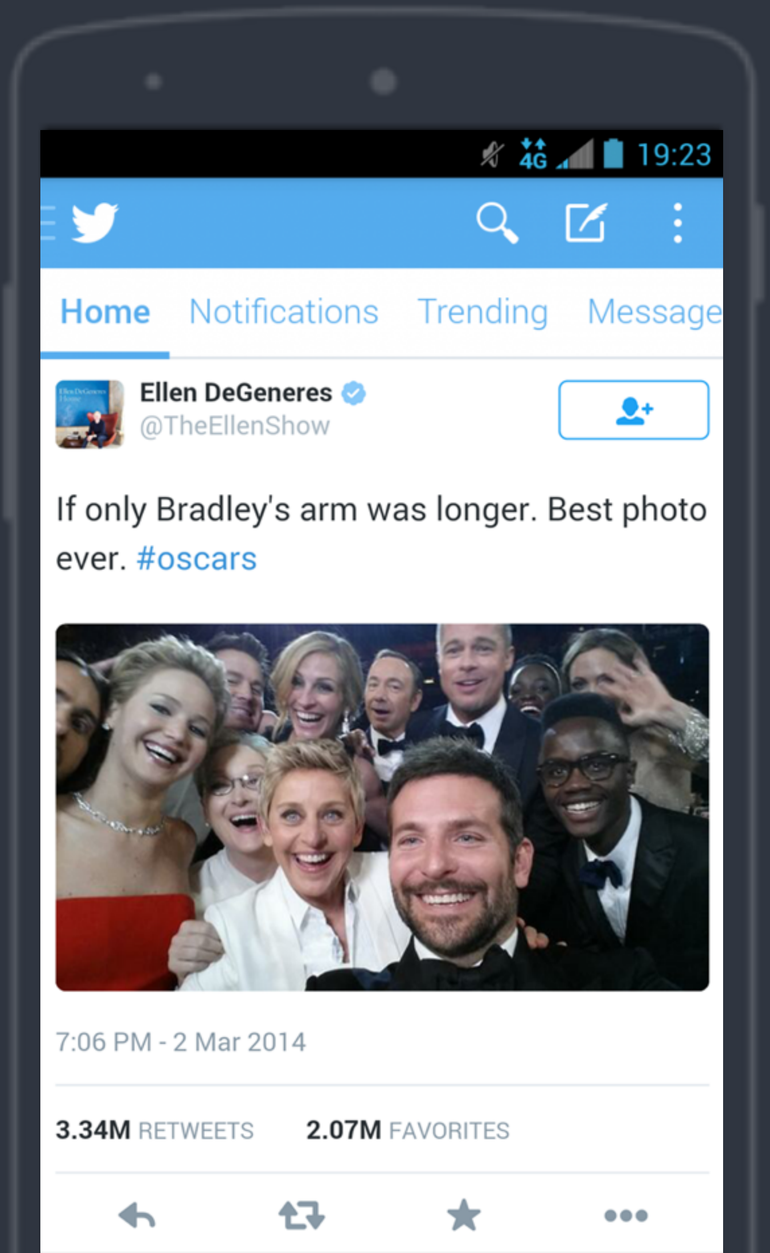
Yet, there’s NO such “law” in Scenario Design

What would people do after editing photos?



People **share** immediately either on social media or instant messenger.

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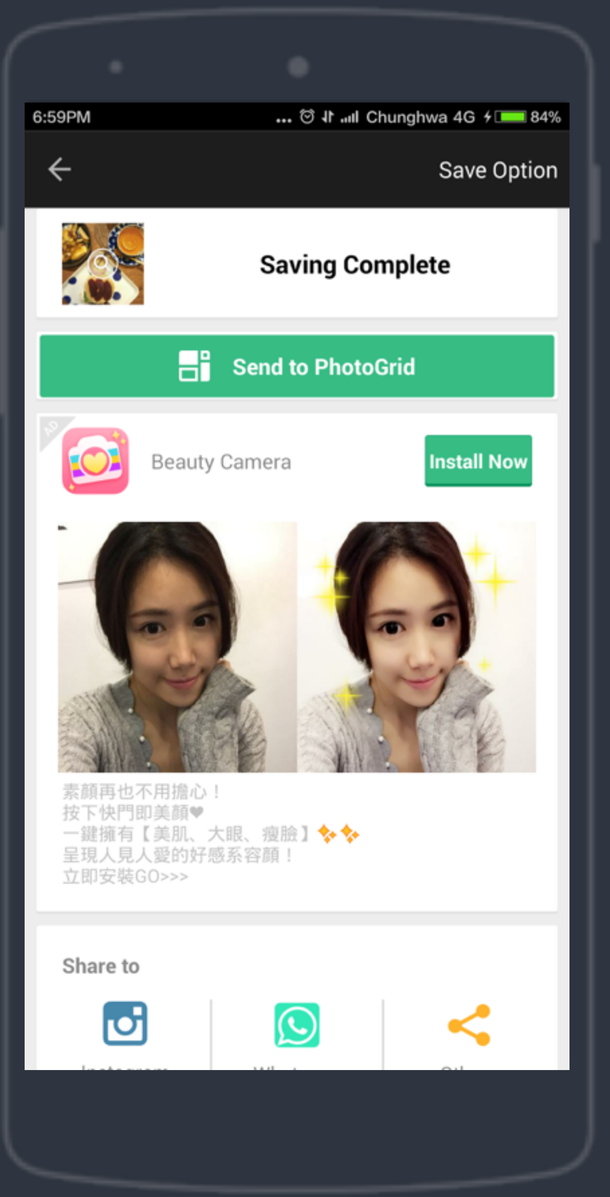
User behavior flow cannot be interrupted
But you can extend it.

Take a photo → Edit → Share



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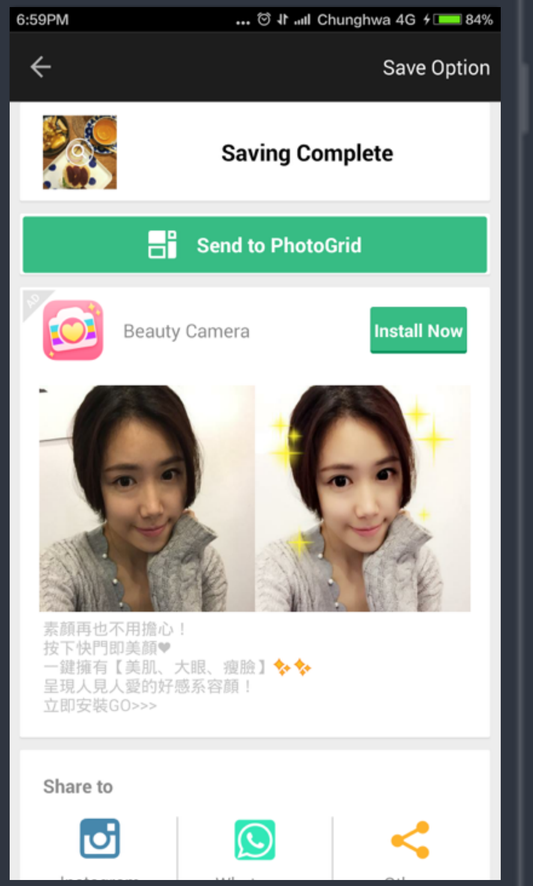

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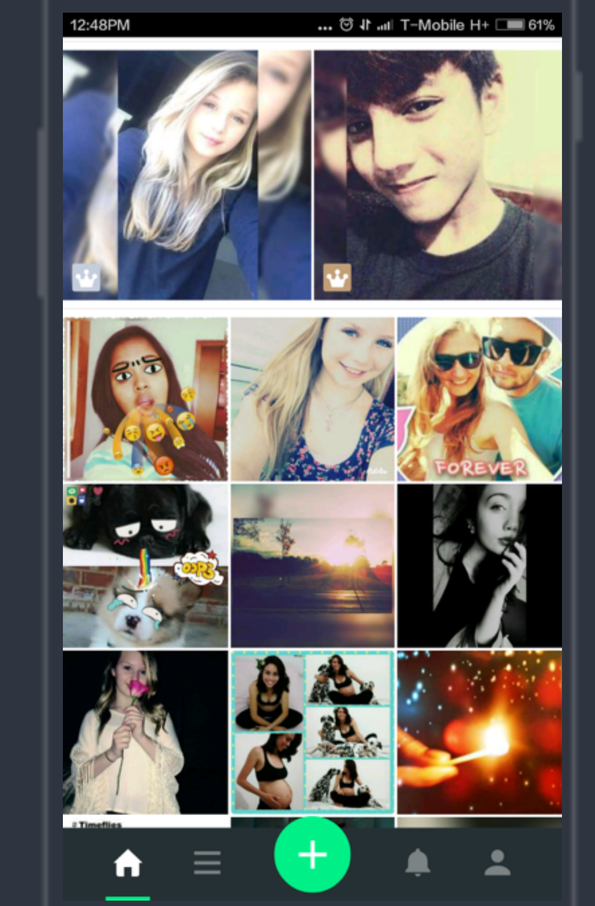

PhotoGrid

Social Media

PhotoGrid Community

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Big data is like teenage sex:

everyone talks about it, nobody really knows how to do it, everyone thinks everyone else is doing it, so everyone claims they are doing it…

- Dan Ariely, a professor of Duke Univ

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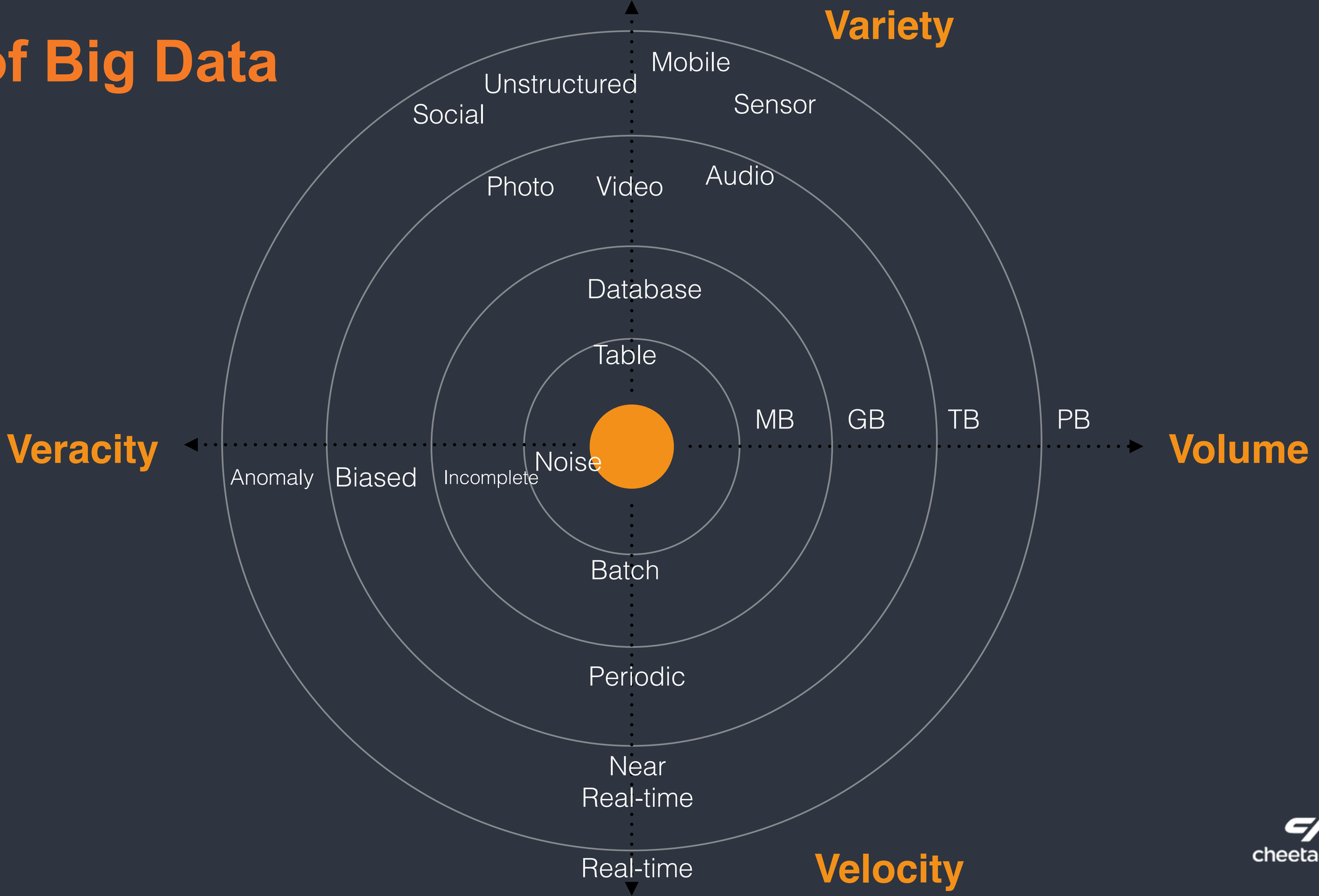
4V of Big Data



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Big Data plays notable role in Mobile Advertising

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Big Data

CM Cloud Data

Demand

Advertisers
Ad Network
Facebook
Twitter

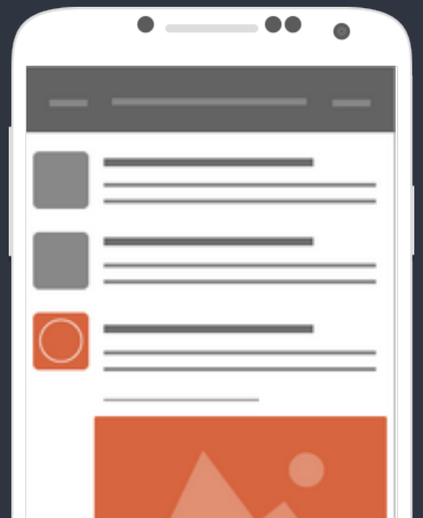
Advertiser

ad platform

Supply

Cheetah Apps

Publisher



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How to Use Big Data?

Raw Data

Data Mining

Machine Learning
Many kinds of algorithms

Audience Insights

Google Play
App Category

Interest Tag

Profile

Click Preference

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Big data mining - Algorithms

Classifier (Supervised Learning)

- Logistic Regression
- Gradident Boosted Decision Tree
- SVM
- Neutral Network
- Naive Bayes
- Boosting …

Clustering (Un-supervised Learning)

- Gaussion Mixture Model
- K-Nearest Neighbour
- LDA ...

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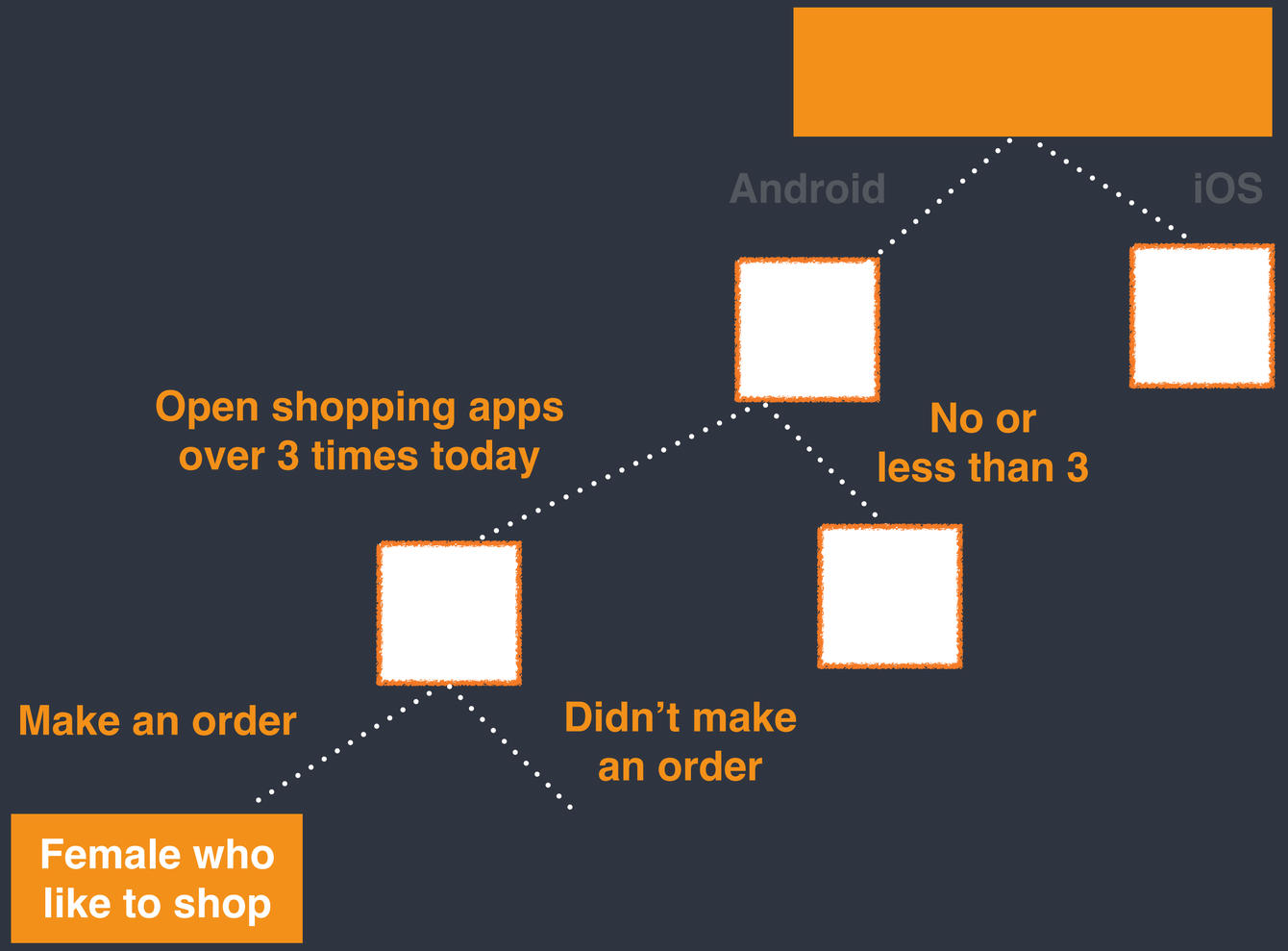
One of algorithms:
Gradient Boosting Regression Trees, GBRT



User Type A

User Type B

What is Machine Learning?

Learning =

Representation

Evaluation

Optimization

Profile

Ad Performance

A/B Testing

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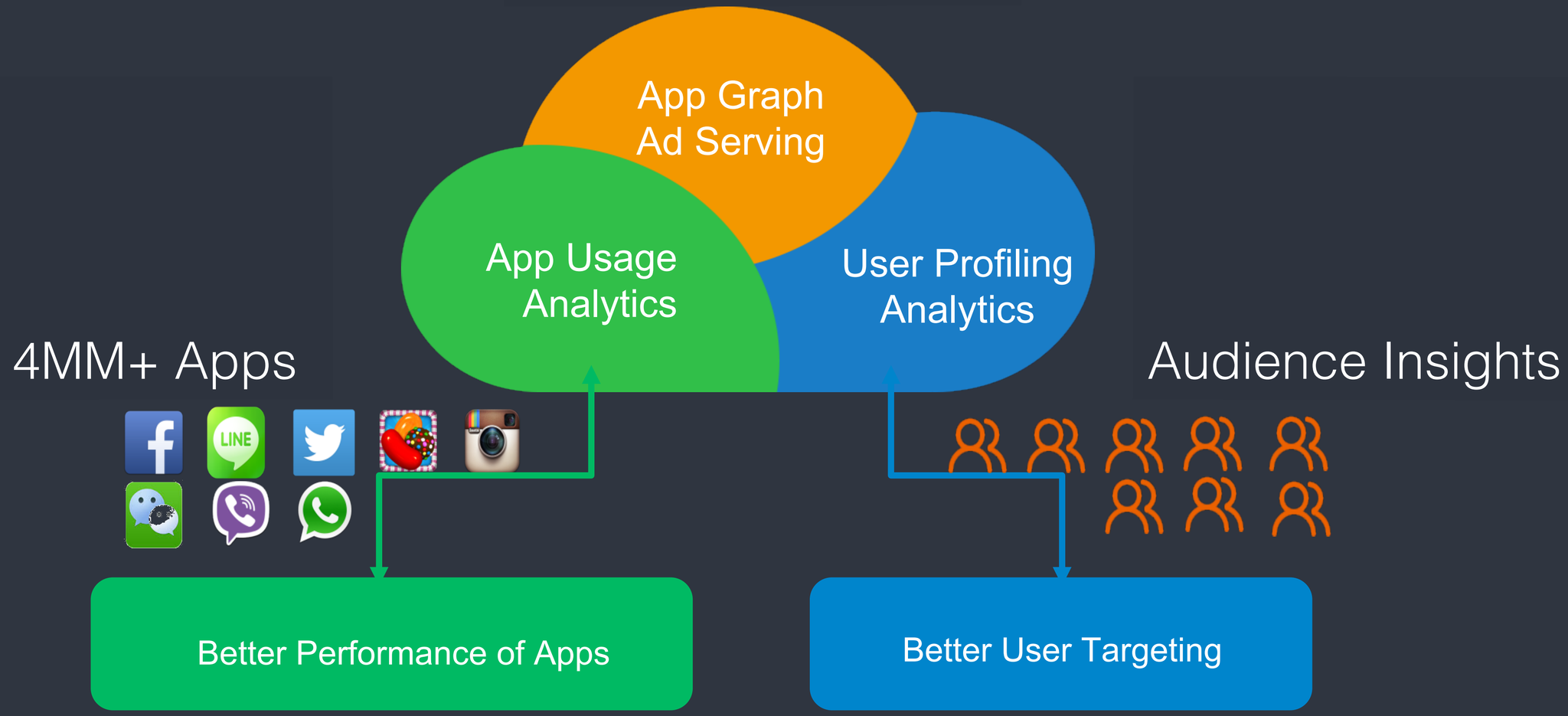
Cheetah App Cloud



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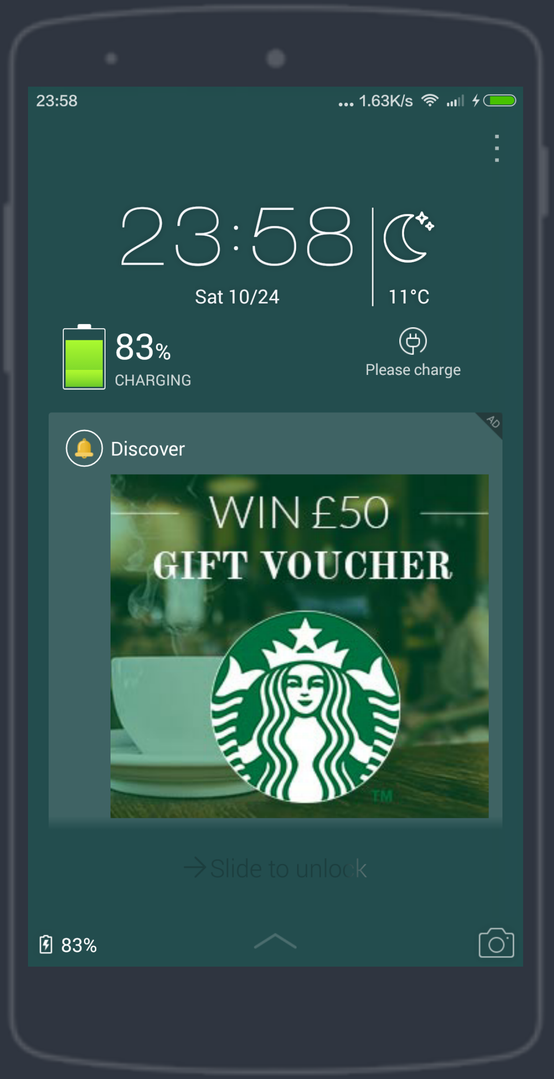
App Graph Ad Serving - Showroom



Audience Insights from Mobile Behavior and Consumption

Social Data Model

Mobile Usage Derived Model

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Converting Data into Audience Insight

Profile Targeting:
Ad Display Based on **App Usage Graph**

In-App Tracking:
In-app events like purchases and sign-ups are attributed to the media source

DataSync Optimization:
Campaign data gets smarter by the second to increase ROI

Retargeting:
Re-engage users to return to your app with targeted campaigns

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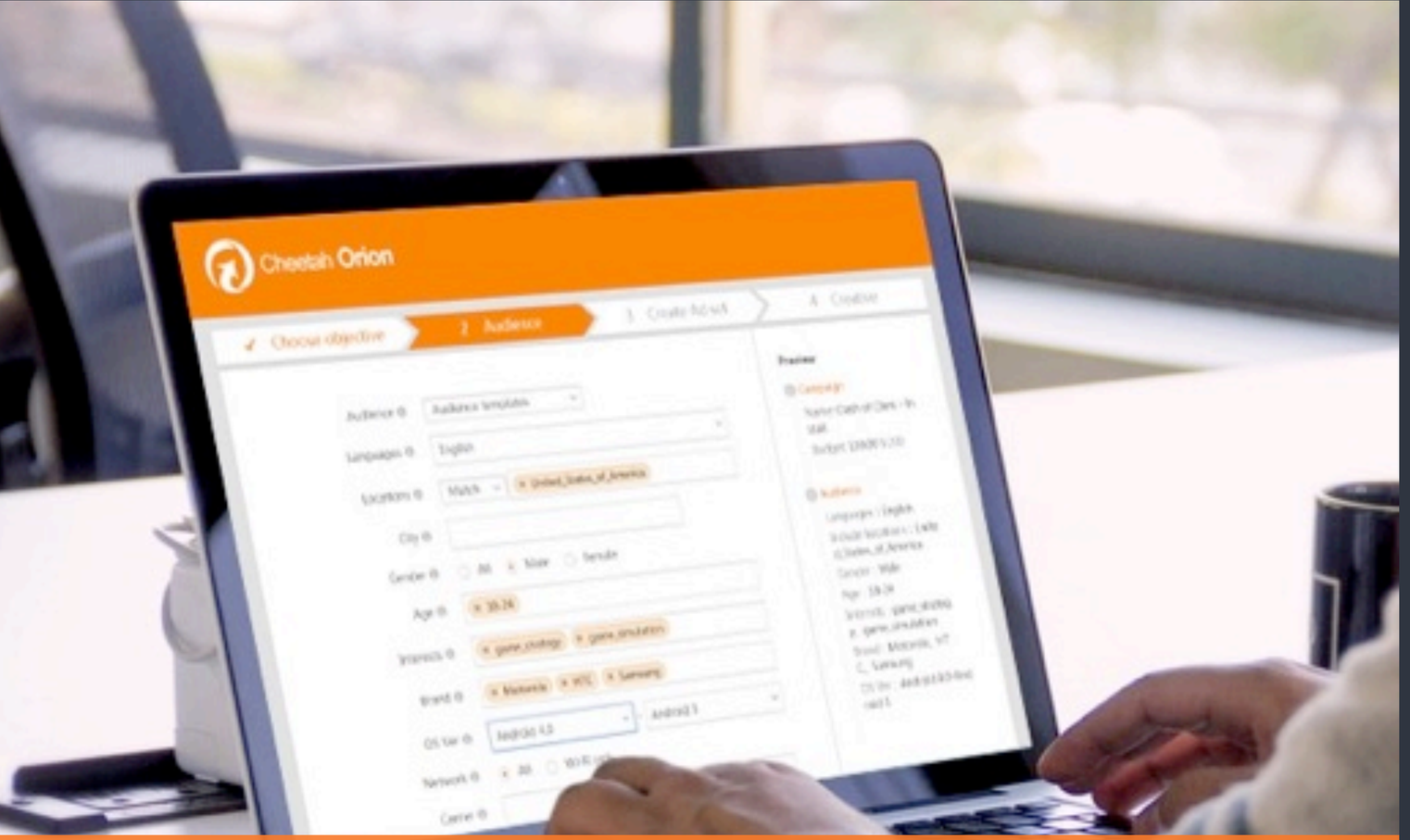

Leverage Cheetah Orion for Precise Audience Targeting

Select the Right Audience

- 42+ proprietary tags
- Psychographics/ Demographics/Consumer Behavior
- Device/OS/Carrier
- Localization
- Purchase & Engagement Patterns
- Predictive algorithm

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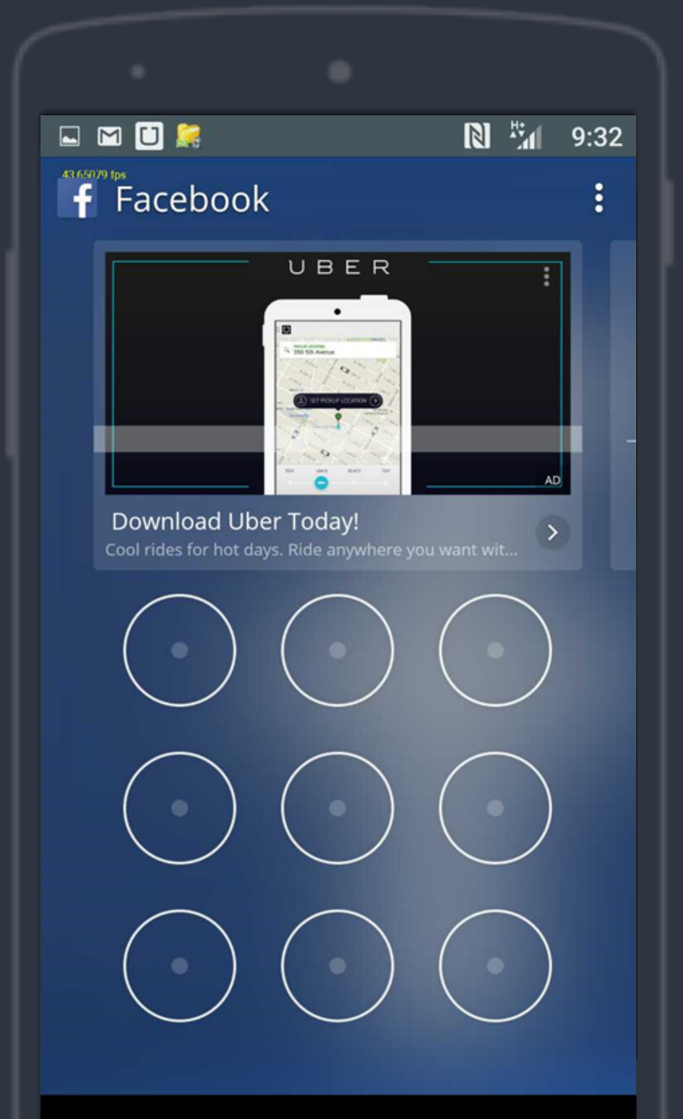
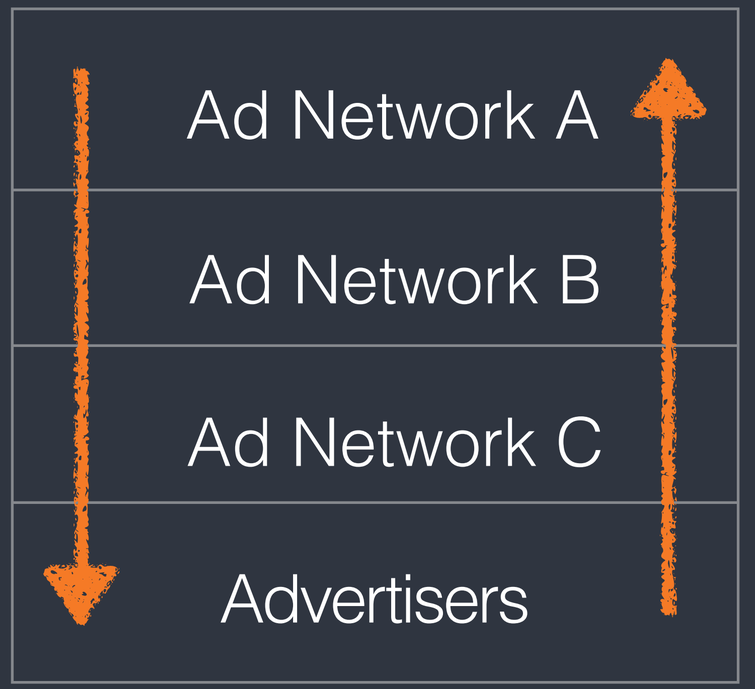
Yield Optimization - eCPM Comparison





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Thanks.

arther@cmcm.com