



Yonatan V. Levin



Google Developer Expert



levin.yonatan



parahall

Gett



0000ops...



>100 Cities



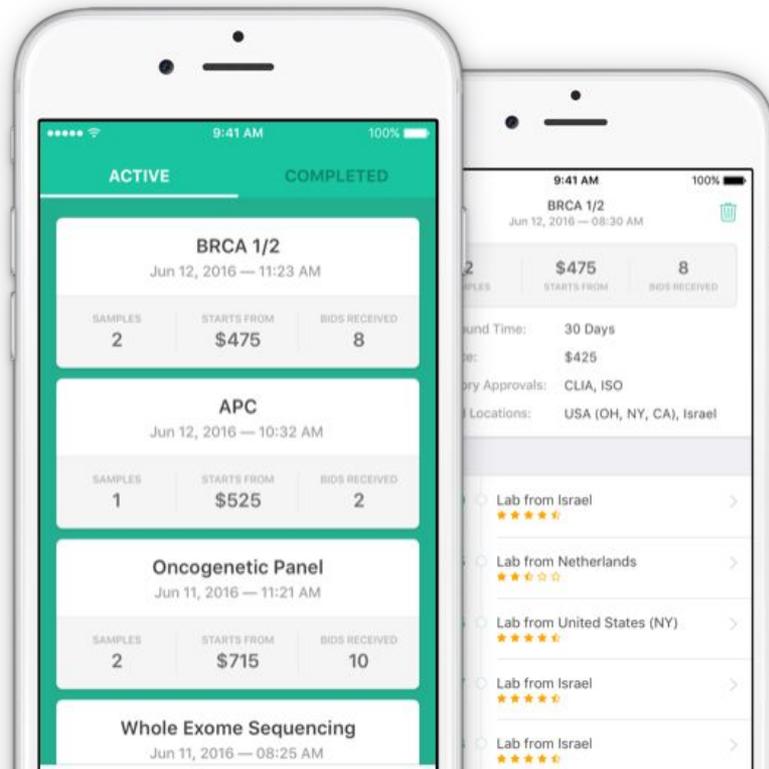
Ruby, Go, Python, Microservices



> 30M users



Making genetic tests accessible



**Tons of experience of building Mobile
Product from 1st user to 30M users.**



> 2000 members



Together with
Google Developers



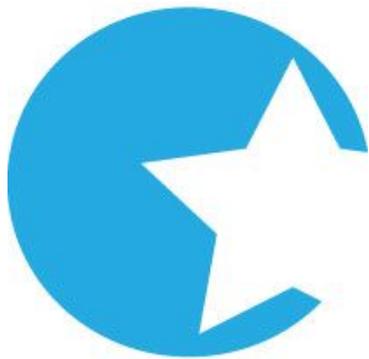
Women Techmakers



Largest Android Active Community



From App to Product



Editor's
Choice



Downloads



34,628 





Android Dagger 2

UIElement Property1 Property2 UIElement



```
SyncOrderService scheduleOrderSending()
1 package com.kolgene.android.model.service;
2
3 import ...
33
34 public class SyncOrderService extends GcmTaskService {
35
36     public static final String ORDER_ID = "orderId";
37     public final
38     public stati
```

```
...
70
71
72
73
74     c = getContentResolver().query(
75         KolGeneContract.OrderEntry.buildOrderUriWithIdAndStatus(id, Order.NOT_SYNCED), null, null,
76         null, null);
77     if (c == null) return GcmNetworkManager.RESULT_FAILURE;
78     Order order = new Order();
79     if (c.moveToFirst()) {
80         order.getSelfFromCursor(c, order);
81     }
82 }
```



APK



APK

Store Listing

Pricing and Distribution

In-app Products

Services & APIs

Optimization Tips

PRODUCTION

Publish your app on Google Play

BETA TESTING

Set up Beta testing for your app

ALPHA TESTING

Version
1

There is no APK in Production

Upload new APK

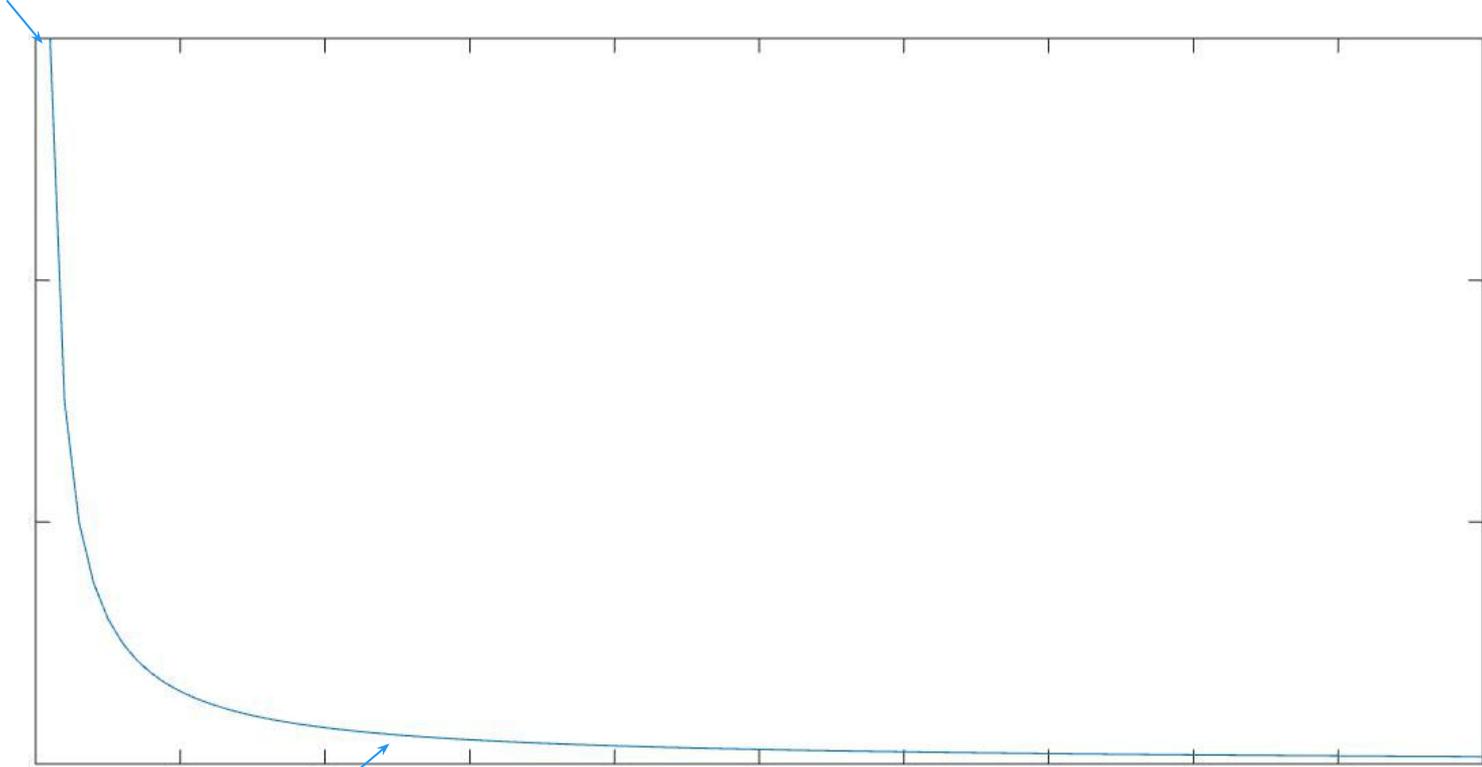
A large group of Star Wars fans in costumes posing for a photo. The group includes characters like Chewbacca, Darth Vader, Stormtroopers, Boba Fett, Yoda, and many others. The text "Friends, Family & Fools" is overlaid in the center.

Friends, Family & Fools



Number of users

FFF



Mainly 1F





Who am I?
Developer or Business?

*“The best code it’s code that doesn’t need to be
written”*

Not just a **developer**
but **product owner**.

My job isn't to write code.

It never was.

**It has always been to make people's lives
better and more productive**



Fly on the wall

THE FRUIT SHOPPE Categories Account My Cart

PORTLAND, ME, US • 205-209.79.222

Brittany Grant
9:32 AM • SAFARI, IOS • 12 EVENTS

via <https://www.google.com/>

Visit <http://www.thefruitshoppe.com/>

Changed ("widget_id":"56998328104808...)

Clicked : #navbar ul.navbar-nav li a[hr...

Our new homepage design seems to be working. I think people are responding to the rich, colorful imagery just like we'd hoped.

JOSH@THEFRUITSHOPPE.COM
11:40 AM • DELETE

Clicked : #AppView div.navContainer div.pa...

Navigate <http://www.thefruitshoppe.com/>

Support & Feedback

BLUEBERRIES 20% OFF

SHARE AS HIGHLIGHT

Discuss this session with your team

FRESH SHARE Start at 1:29 ORANGES

HOMEMADE GRANOLA

1:29 / 4:57 • Share 1x Skipping Inactivity



Create profile

Full name
Orly Agamy

Institute
Soroka Medical Center

▼ PhD

050-123-4567

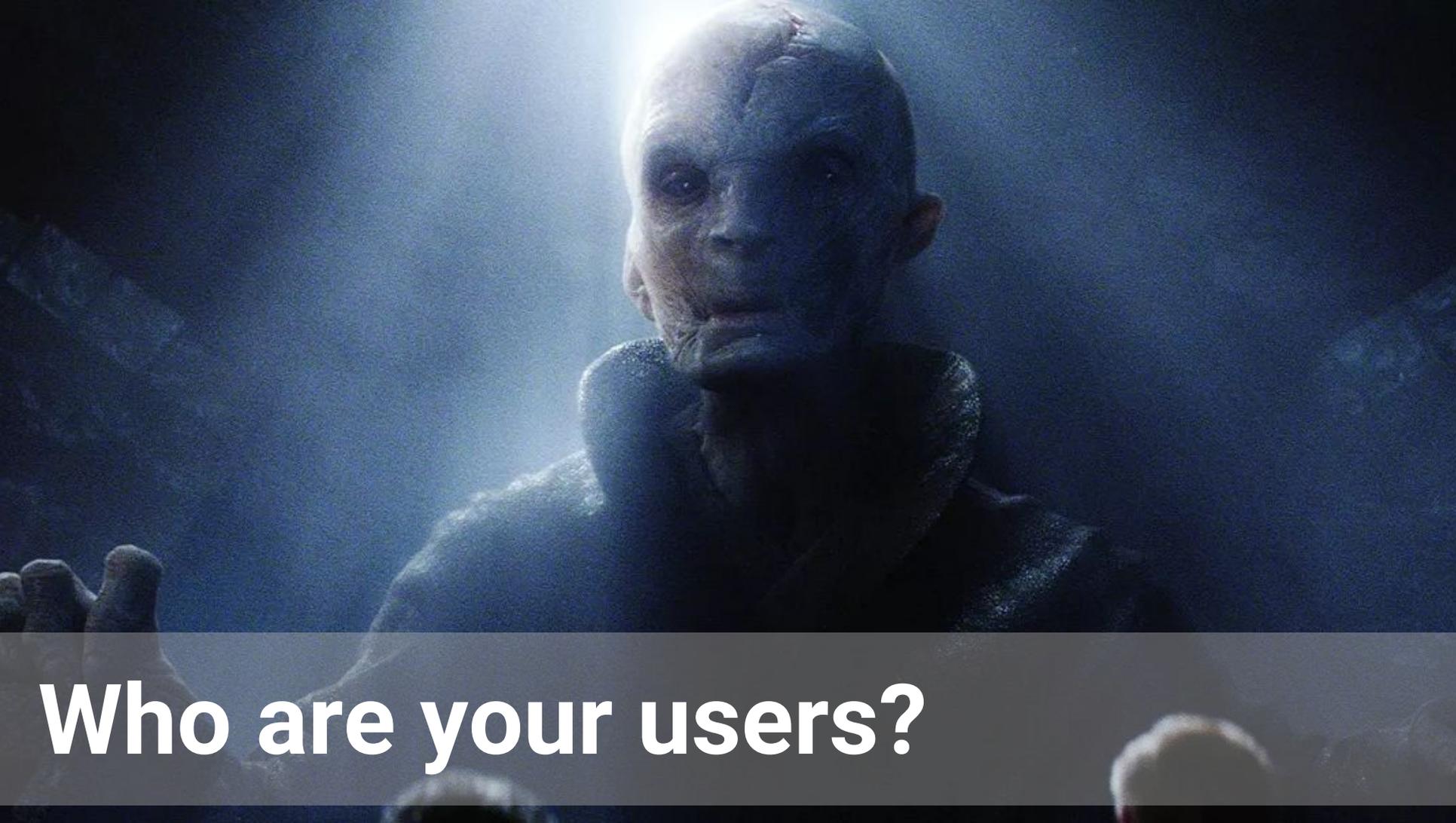
SEND

05:16 / 10:02 1X

Timeline

00:00	SignInActivity
00:02	Connected to mobile network
01:02	SignUpActivity
01:37	App is in background
01:52	App is in foreground
02:22	App is in background
02:30	App is in foreground
02:55	CreateProfileActivity
03:23	App is in background
03:25	App is in foreground
03:59	App is in background
04:15	App is in foreground
06:21	CongratsActivity
06:34	App is in background
06:37	App is in foreground
06:40	App is in background
10:02	Session reached max record duration





Who are your users?



Google Analytics

Search reports and help

CUSTOMIZATION

Reports

REAL-TIME

AUDIENCE

Overview

Active Users

Cohort Analysis BETA

User Explorer

Demographics

Interests

Geo

Behavior

New vs Returning

Frequency & Recency

Engagement

Technology

Mobile

Custom

Benchmarking

Users Flow

ACQUISITION

BEHAVIOR

ADMIN

New vs Returning

Mar 31, 2017 - Apr 6, 2017

Customize Email Export Add to Dashboard Shortcut

This report is based on 100% of sessions. [Learn more](#) Greater precision

All Users
100.00% Sessions

+ Add Segment

Explorer

Summary Site Usage Ecommerce

Sessions vs. Select a metric

Day Week Month

Sessions



Primary Dimension: User Type

Plot Rows Secondary dimension Sort Type: Default

advanced

User Type	Acquisition			Behavior			Conversions		
	Sessions	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration	Goal Conversion Rate	Goal Completions	Goal Value
	257 <small>% of Total: 100.00% (257)</small>	40.47% <small>Avg for View: 40.47% (0.00%)</small>	104 <small>% of Total: 100.00% (104)</small>	60.31% <small>Avg for View: 60.31% (0.00%)</small>	2.35 <small>Avg for View: 2.35 (0.00%)</small>	00:03:38 <small>Avg for View: 00:03:38 (0.00%)</small>	0.00% <small>Avg for View: 0.00% (0.00%)</small>	0 <small>% of Total: 0.00% (0)</small>	\$0.00 <small>% of Total: 0.00% (\$0.00)</small>
1. Returning Visitor	153 (59.53%)	0.00%	0 (0.00%)	52.94%	3.01	00:05:11	0.00%	0 (0.00%)	\$0.00 (0.00%)
2. New Visitor	104 (40.47%)	100.00%	104 (100.00%)	71.15%	1.38	00:01:21	0.00%	0 (0.00%)	\$0.00 (0.00%)

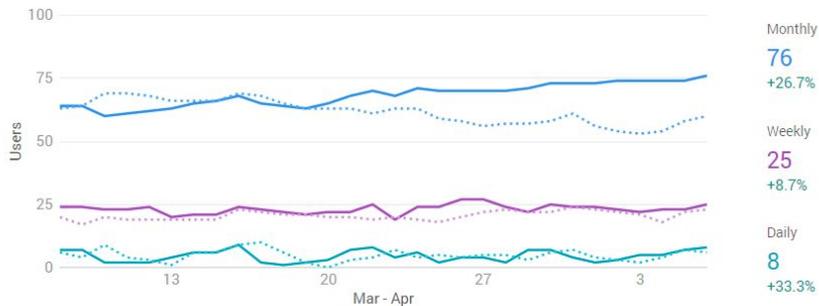
Show rows: 10 Go to: 1 1 - 2 of 2

This report was generated on 4/7/17 at 7:36:27 PM - Refresh Report



Firebase Analytics

Active users



Average revenue

ARPU	ARPPU
Monthly	Monthly
\$0.00	\$0.00
-	-
Weekly	Weekly
\$0.00	\$0.00
-	-
Daily	Daily
\$0.00	\$0.00
-	-

first_open attribution

120 days ending Apr 6

Source	First Open	Lifetime Value (LTV)
(direct)	187	\$0.00

1 - 1 of 1 < >

[VIEW FIRST_OPEN ATTRIBUTION](#)

Retention cohorts

6 weeks ending Apr 6

	Week 0	Week 1	Week 2	Week 3	Week 4	Week 5
	100%	14.8%	2.1%	8.1%	0%	11.1%
Feb 19 - Feb 25						
Feb 26 - Mar 4						
Mar 5 - Mar 11						
Mar 12 - Mar 18						
Mar 19 - Mar 25						
Mar 26 - Apr 1						

[VIEW RETENTION COHORT](#)

User engagement

Daily engagement

23m 50s

+57.1%



Sessions per user

1.7

-6.5%



Daily engagement per user

2m 58s

+17.9%



Avg. session duration

1m 59s

+44%



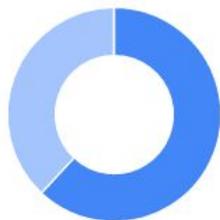
Measure what matters!

In-app purchase and purchases drive revenue. Take advantage of these conversion events and better manage your business.

[Learn more](#)

Demographics ?

Gender



Male

61.9%

+85.7%

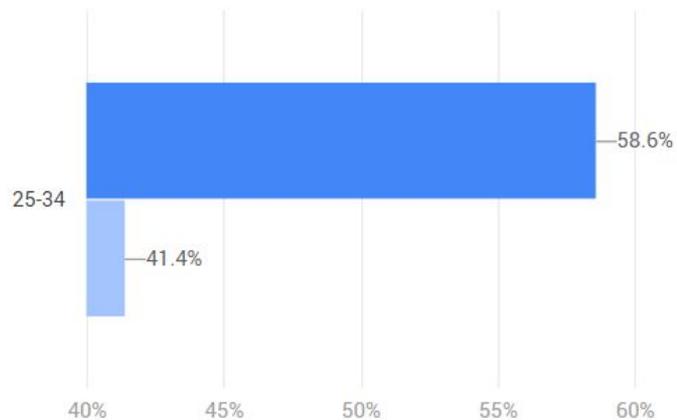


Female

38.1%

-22.6%

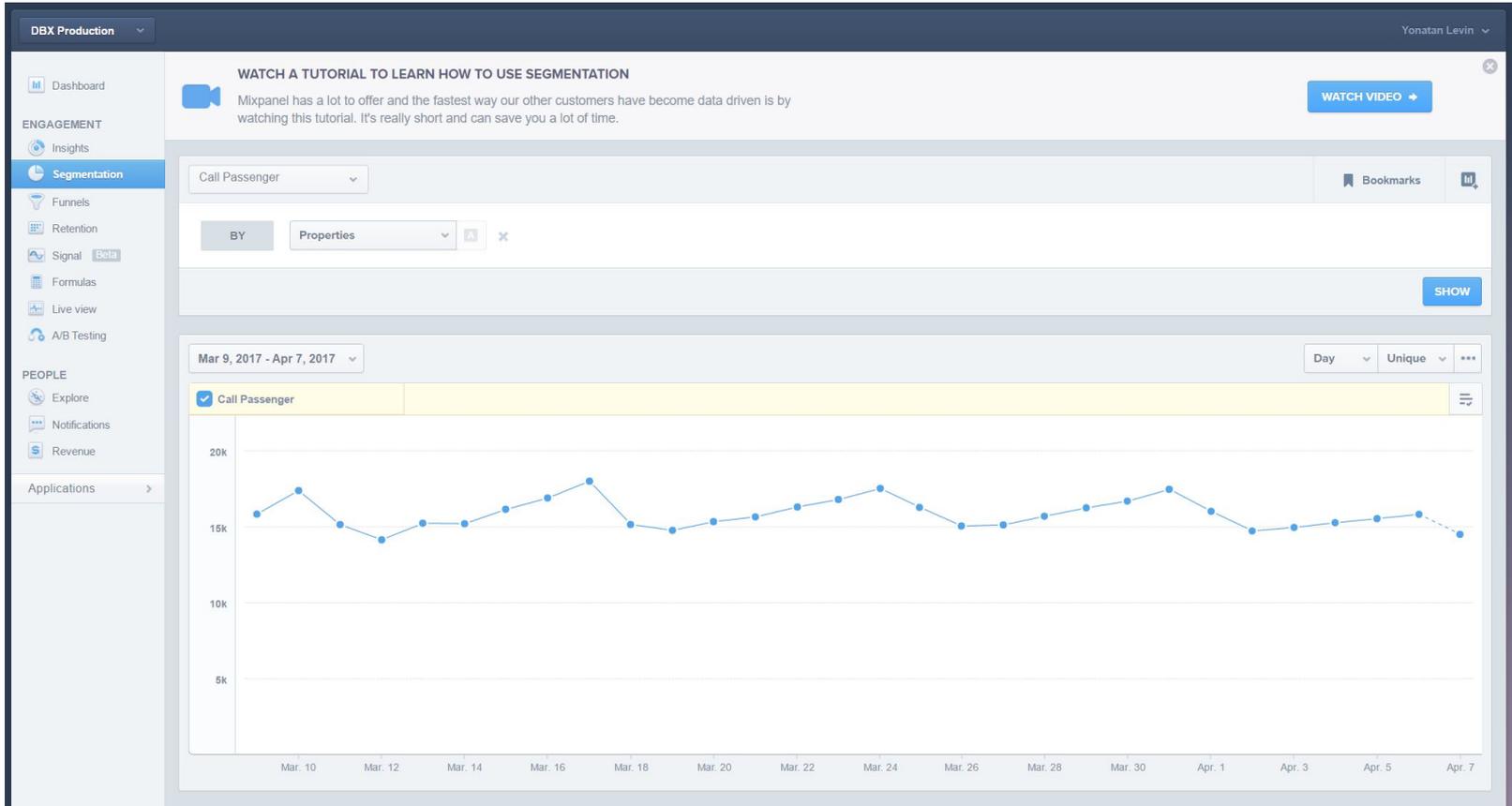
Age



Interests

% of Users	Categories
28.7%	Arts & Entertainment/TV & Video/Online Video
21.7%	Internet & Telecom/Mobile & Wireless/Mobile Apps & Add-
15.7%	Arts & Entertainment/Music & Audio/Music Streams & Do
15.7%	Games/Online Games
7.8%	Computers & Electronics/Software/Software Utilities
6.1%	Arts & Entertainment/Music & Audio/Pop Music
4.4%	Online Communities/Photo & Video Sharing/Video Sharing

mixpanel







Words of Power:

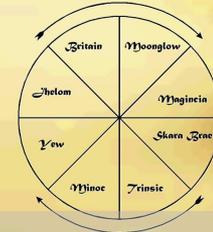
An Negate or Dispel
Bet Small
Corp Death
Des Lower or Down
Ex Freedom
Flam Flame
Grav Field
Hur Wind
In Make, Create or Cause
Jux Danger, Trap or Harm
Kal Summon or Invoke
Lor Light
Mani Life or Healing
Nox Poison
Orr Magic
Por Move or Movement
Quas Illusion
Rel Change
Sanct Protect or Protection
T...
U...
V...
W...
Xe...
Yle...
Zu Sleep

Motions:

Blacks: Blindness
Blacks: Sarc
Blues: Steer
Blues: Blindness
Greens: Poison
Greens: Highroad
Orange: Sleep
Orange: Spider's Silk
Purple: Explosion
Purple: Sulfurous Ash
Red: Refractus
Red: Black Pearl
White: Strength
White: Alacrity
Yellow: Healing
Yellow: Energy

The Moongates of Britannia.

Phase	Steps
1	0
2	1
3	2
4	3
5	4
6	5
7	6
8	7



Start in the town that you are departing.
Depending on the current phase of the moon, move around the disk the specified number of steps to the next gate.

Where to find them?



Baidu 百度

Яндекс

Google

Player name: Nargaque
Health: 8643 / 8643
Mana: 10397 / 10397

Trade District
Map
6:39

Focus on niche

Aevor the Love Fool
<Eat My Crit>

General | Combat Log

- [2. Trade] [Kopperhead]: yes
- [2. Trade] [linsane]: wts [\[Hellfrozen Bonegrinders\]](#)
- [2. Trade] [Chankanaab]: can you buy wrathful shouldered with honor?
- [2. Trade] [Breakdowns]: Yes
- [2. Trade] [Projecthealz]: If tnk and 2dps for weekly
- [2. Trade] [Frappé]: DUH! what's wrong with it.

Total time played: 6 days, 9 hours, 1 minute, 7 seconds
Time played this level: 0 days, 0 hours, 21 minutes, 19 seconds

XP 918 / 1523800

Ability bar with icons for various spells and abilities.

Bottom action bar with icons for various abilities and items.

Once upon a time





No one buys a feature, they buy a story

Simon Sinek

https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action

Simon Sinek:

How great leaders inspire action

TEDxPuget Sound · 18:04 · Filmed Sep 2009

45 subtitle languages ?

View interactive transcript



Define what will make your app
successful.
Go for it.



KPI:

Key performance indicator

of active users

of orders

of \$ spent in your app

daily usage

of files uploaded

Reports

REAL-TIME

AUDIENCE

ACQUISITION

BEHAVIOR

Overview

Behavior Flow

Site Content

Site Speed

Site Search

Events

Overview

Top Events

Pages

Events Flow

Publisher

Experiments

CONVERSIONS

Explorer

Event Site Usage

Total Events vs. Select a metric

Total Events



Primary Dimension: Event Action Other

Plot Rows Secondary dimension Sort Type: Default

Event Action ?	Total Events ?	Unique Events ?
	140 % of Total: 97.22% (144)	93 % of Total: 97.89% (95)
1. login.submit	48 (34.29%)	30 (32.26%)
2. login.open	47 (33.57%)	28 (30.11%)
3. signup.open	16 (11.43%)	16 (17.20%)
4. download-apps.open	14 (10.00%)	6 (6.45%)
5. signup.submit	11 (7.86%)	10 (10.75%)
6. download-apps.open-link	4 (2.86%)	3 (3.23%)

Once you know **what to tell**,
let's focus **how to tell**

38_{sec}

average
interaction time

23%

Apps used
only once

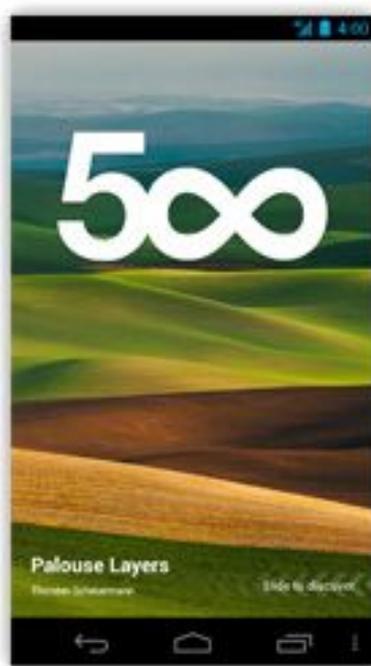
One time shot



only **3** to **5** sec

to form a first impression

Splash screen







Splash screen is evil

Onboarding

Instant
Everything

90 seconds to start, 3 minutes
to file a claim



GET STARTED

Lemonade



Personal Insurance Assistant

Hey Gal, I'm Maya. Let's get you
some great insurance



What's your home address?

80 Broad St, New York, NY



Do you own or rent it?

OWN

RENT

Show just what users need to know
to get started

When to use

App is empty and requires user to populate it for first use

App relies on bespoke gestures unfamiliar to most users

App requires personal input for first use

App has been updated with new features

Complex functionality such as in a productivity-type app

Measure it!

Sign-In Wall

12:30

Welcome!

Sign up to continue.

Email
your.email@mail.com

Password
●●●●●●●●

SIGN UP

Forgot your password?

Already have an account? Sign in



12:30

New order

Test name
Geno

Max price	Quantity	Turn around time
\$	3	30 days

Regulatory approvals
Default

Preferred Location
All locations

q w e r t y u i o p
a s d f g h j k l
↑ z x c v b n m ✕
?123 , . ←

Forcing registration too early can cause more than 85% of users to abandon the product

A close-up photograph of Tom Cruise from the movie 'Mission: Impossible - The Final Reckoning'. He is wearing a white dress shirt and a patterned tie, holding a black mobile phone to his ear with his right hand. His mouth is wide open in a shout, and his eyes are wide and intense. The background is a blurred office setting with windows. A large white speech bubble with a black outline is positioned on the right side of the image, containing the text 'SHOW ME THE MONEY!' in bold, black, sans-serif capital letters.

**SHOW
ME THE
MONEY!**

12:30

New order

Test name
Geno

Max price	Quantity	Turn around time
\$	3	30 days

Regulatory approvals
Default

Preferred Location
All locations

q w e r t y u i o p
a s d f g h j k l
z x c v b n m
?123 , .



12:30

Welcome!

Sign up to continue.

Email
your.email@mail.com

Password
●●●●●●●●

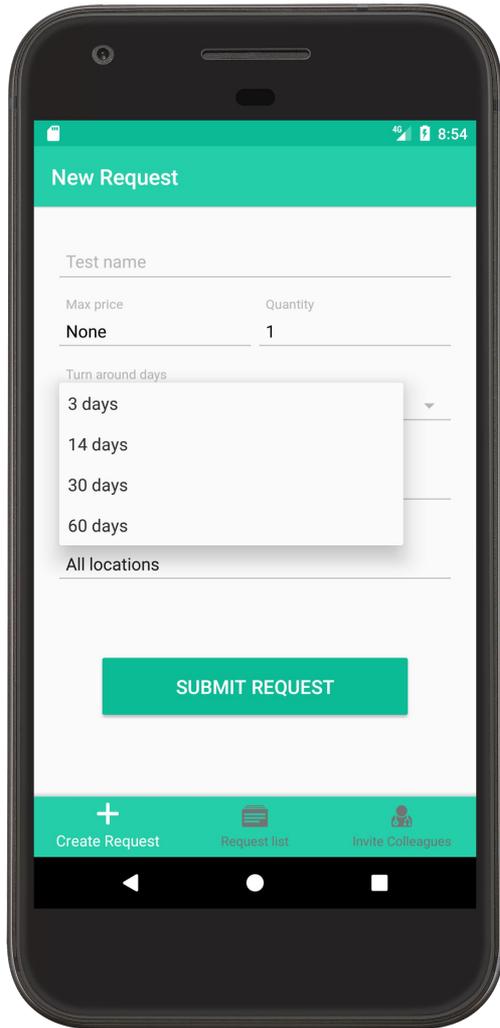
SIGN UP

Forgot your password?

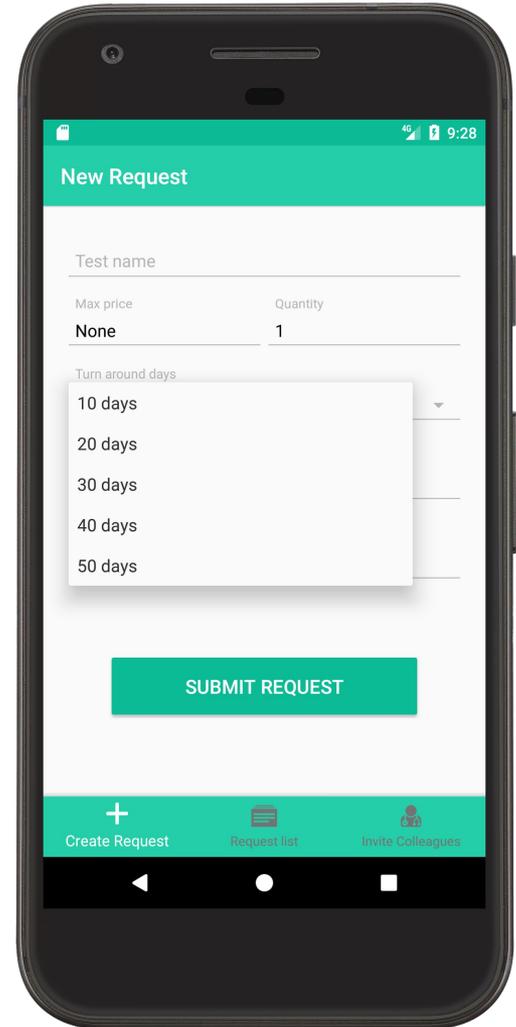
Already have an account? Sign in

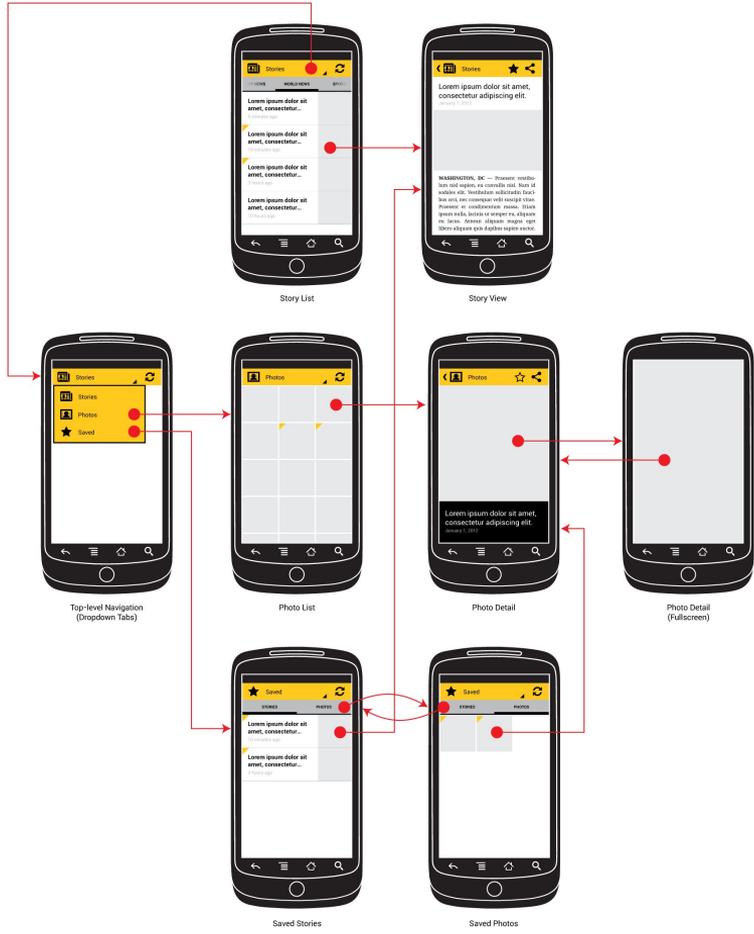
Tailor the **experience**.
Don't afraid to **experiment**.

A

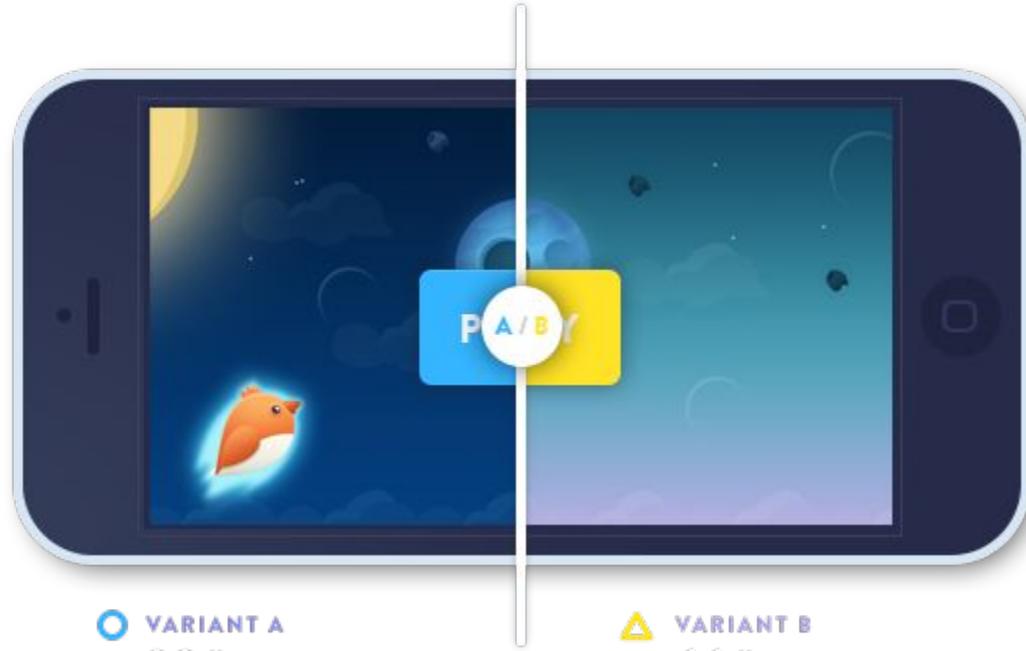


B





mixpanel



○ VARIANT A
33%

△ VARIANT B
66%



Remote Config

Customize and experiment with app behavior using server-side configuration

Define a new condition

Use conditions to provide different parameter values if a condition is met

Name

Color



Applies if...

User in random percentile

A fractional percentile randomly and persistently assigned to each user on a per-project basis.

User in audience

Firebase Analytics audiences that include the user.

Device region/country

The inferred region or country for the user's device.

Device language

The user's chosen language and locale.

User property

Firebase Analytics user properties that user has. 

AND

CANCEL

CREATE CONDITION

ADD PARAMETER

signup_prompt

V1 Promo Eligibility for Nigerians

Sign up to enjoy the promo running for Nigerian users. :)

Default value

Hey, please sign up!

min_password_length

5

is_promotion_on

V1 Promo Eligibility for Nigerians

true

Default value

false

color_primary

V1 Promo Eligibility for Nigerians

#8BC34A

Default value

#0099E8

color_primary_dark

V1 Promo Eligibility for Nigerians

#689F38

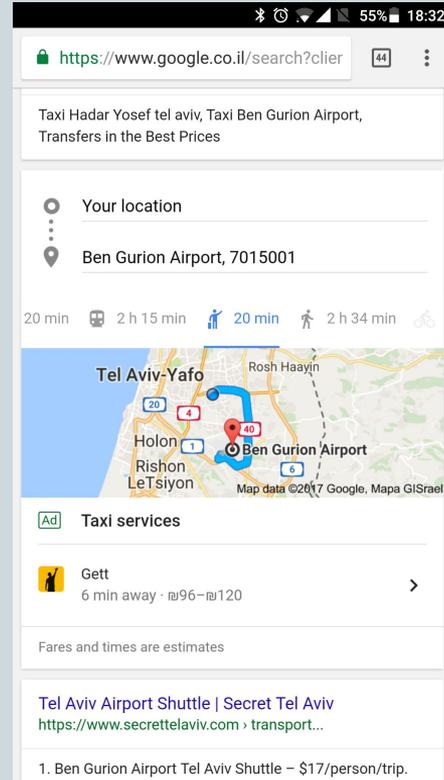
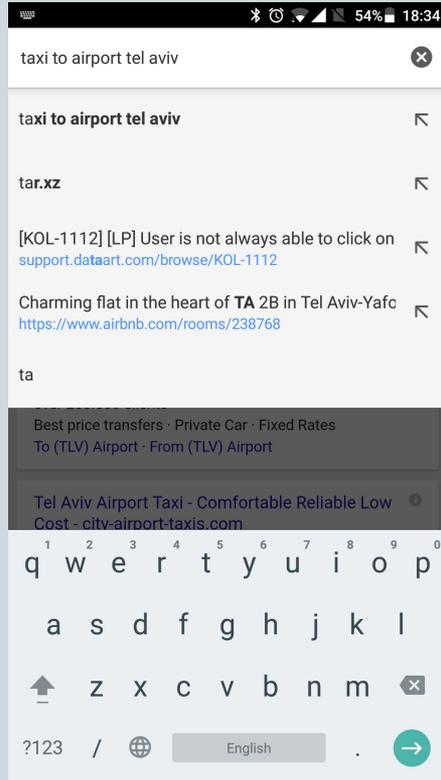
Default value

#0086D4

Don't let them **forget** you.
Communicate the value.

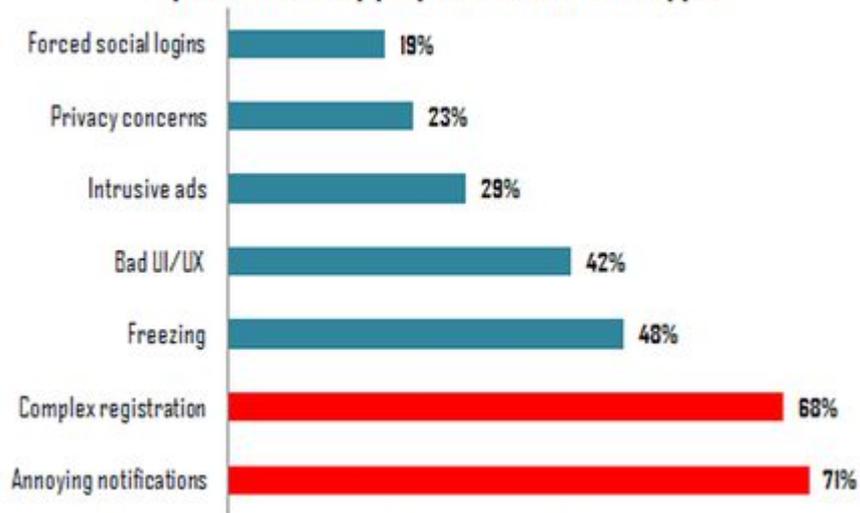
Expose the content

App Indexing



Send message

Top 7 reasons why people uninstall mobile apps?



Source: Appiterate Survey

as a % of all respondents. Each participant mentioned three reasons

High Urgency



PUSH



EMAIL

**Simple
Content**

**Rich
Content**



**IN-APP
NOTIFICATIONS**



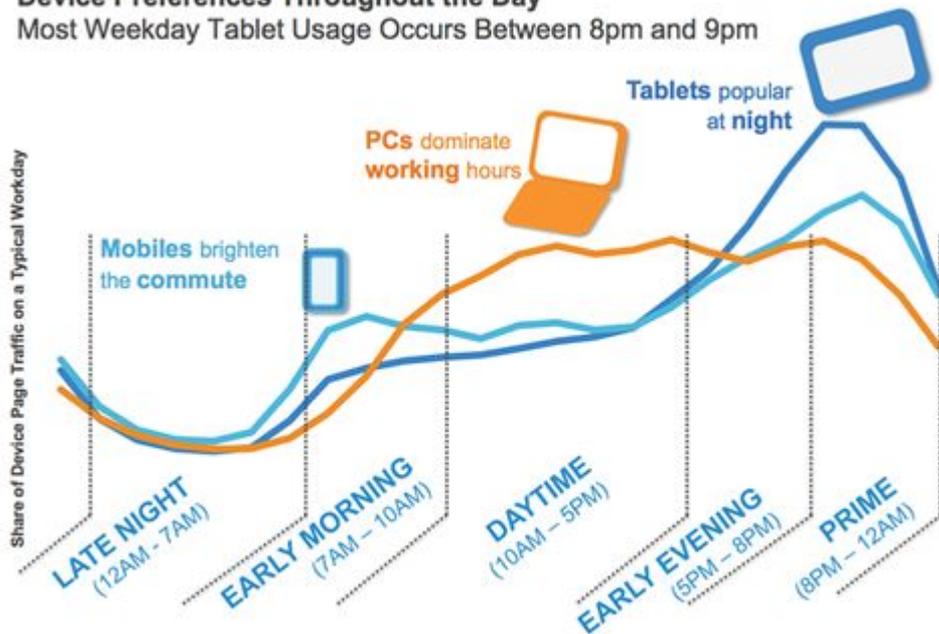
NEWS FEED

Low Urgency

Appboy 😊

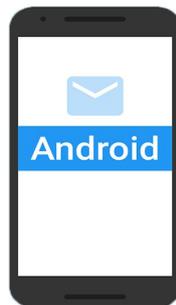
Device Preferences Throughout the Day

Most Weekday Tablet Usage Occurs Between 8pm and 9pm





Notifications Console GUI



1. Analytics
2. Who your user and where he lives.
3. Tell a story
4. Play with user experience
5. Communicate back
6. Repeat



Thank you!



Yonatan V. Levin



Google Developer Expert



levin.yonatan



parahall