

# IT'S APP BUILDING SEASON

HOW ANDROID MARSHMALLOW AFFECTS YOU



# WEBINAR LOGISTICS

- Today's webinar is being recorded
  - You will be emailed a link to catch up or share with colleagues
- We welcome you're feedback
  - These webinars get better with your input
- Ask questions!
  - If you're thinking it, someone else may be too
- If you're having technical difficulties, giggle the gas cap
  - Just kidding, try logging in with a different browser

# BACKGROUND

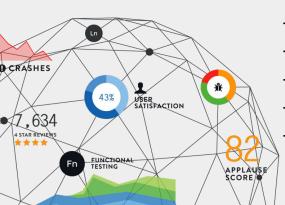
About the presenter



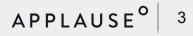
#### **Rich Weiss**

Director of Product Marketing / App Evangelist Applause rweiss@applause.com

About Applause



- The 360° App Quality<sup>™</sup> company
- Founded in 2007
- Four rounds of funding
- Offices around the globe
- Recognized by peers and press
- Over 1.5 million bugs found for more than 3,500 customers



#### A NEW ANDROID IS ON IT'S WAY





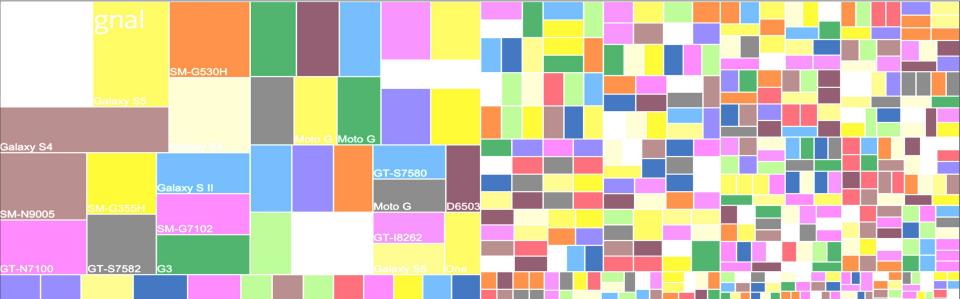
Picture Source: http://developer.android.com

# BUT FIRST, SOME STATS

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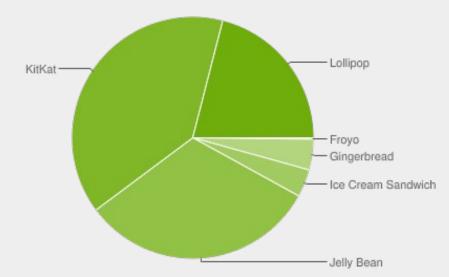




#### FRAGMENTATION IS STILL PERVASIVE



# ADOPTION OF LATEST OSES



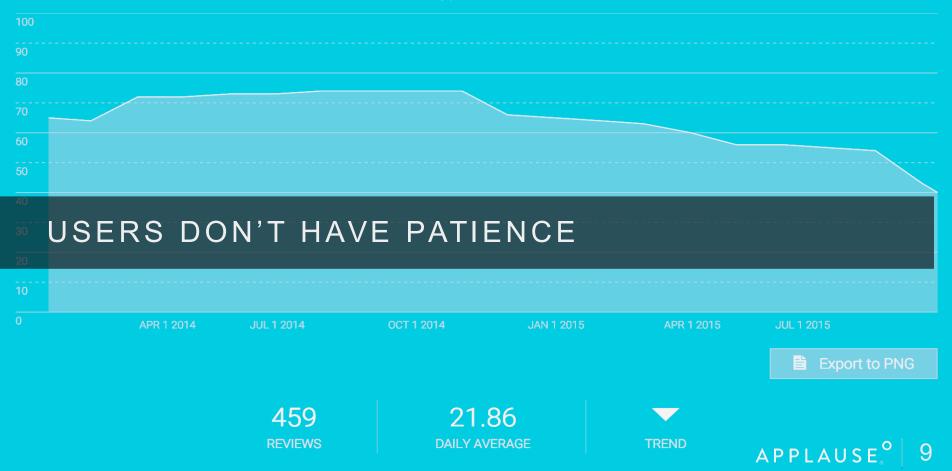
Earlier iOS 7 2% iOS 8

# SO, IT'S OKAY TO WAIT?

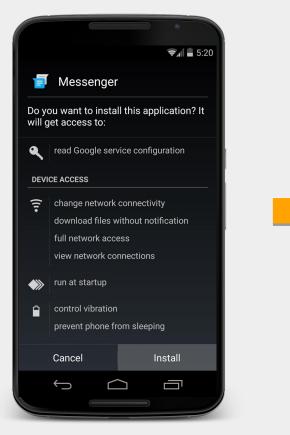


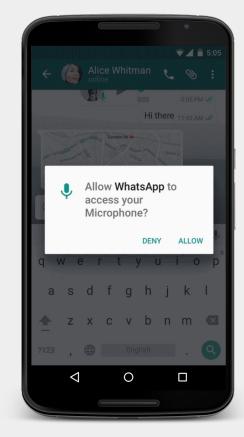
#### TRENDING APPLAUSE ATTRIBUTES

Historical Applause Attribute data



### PERMISSIONS: NOW IT'S PERSONAL





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# PERMISSIONS: WHAT'S CHANGED?

- Move from blanket declarations @ install to runtime prompting
- Grouping of permissions
- Permissions can be revoked or enabled at any time?
  - Yay! User contro.... wait, what?
- But some are just inherent to launching the app
  - Do users really need to grant your device permission to vibrate?
- And others are signature and protected at install
  - You just downloaded Instagram, of course it needs access to the camera

#### APPLAUSE<sup>O</sup> 11

### YOUR APP IS GOING TO CRASH

- This affects apps targeting the Android 6.0 API as well as legacy apps
- Doing nothing, means you're not going to fail friendly



# SO WHAT SHOULD I DO?

- Walk through your app, where are permissions needed?
- Explain to your users why you want a particular permission
  - You also can build in a second chance
- Don't just ask for a permission because you can
- Determine if you want a permission or an intent
  - Intents can be used to pass the job to another app
- Most importantly: determine how you're going to fail in the event of permission denial or revocation

#### WHILE WE'RE EXPECTING THE UNEXEPECTED...

- Two new power sawing modes
  - Doze
    - Unattended, unplugged devices will take a nap
  - App Standby
    - Apps that haven't been used will be deprived
- Say goodbye to system services
  - Network connectivity
  - Background scheduling
  - Alarms
  - Wakeups
  - Sync jobs
- How will you handle it?

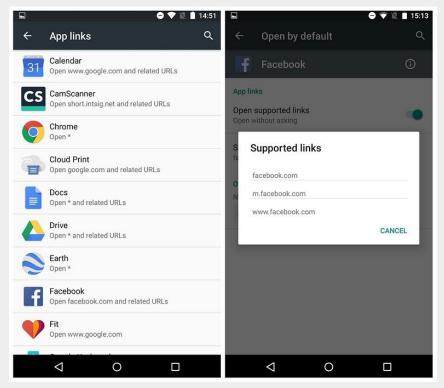
"To expect the unexpected shows a thoroughly modern intellect."

~Oscar Wilde

#### $APPLAUSE_{\circ}^{O} | 14$

# APP LINKING

- Android has made the handling of web links more intuitive
- Apps can now associate themselves with a particular URL structure
- Designed for less prompting
  - User sets up an association
  - User doesn't set one up but there's only one app that handles it
  - User doesn't set one up but there are multiple apps
- Need to work with Web teams to implement structure



APPLAUSE

### SPEAKING OF THE WEB

- Chrome 45 / Android Marshmallow now support custom Chrome tabs
- A cleaner in-app web experience
- Instead of a WebView or popping out to chrome, customize the look and feel of a tab to match your brand
- Retain Chrome capabilities such as saved passwords and autofill

| M 12:00                   | 12:00           | M 🗎 12                  |
|---------------------------|-----------------|-------------------------|
| ← OpenInCustomTabActivity |                 | ← OpenInWebviewActivity |
| OPEN IN CUSTOM TAB        | OPEN IN BROWSER | OPEN IN WEBVIEW         |
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# OTHER CHANGES TO WATCH OUT FOR

#### Camera Controls

- Went from first come / first serve model to priority given to foreground apps
- Have the ability to access both cameras from separate apps (assuming no degradation of performance)
- USB 09 Charge Only
  - Users must specifically grant permission for additional functionalty

#### Floating Menu

- Contextual text menu to allow for copy and paste
- Great UI, must be called upon

#### Auto Backup

- Apps are no fully backed up to Google Drive
- You can include or exclude information and save states/cache from the backups

#### APPLAUSE<sup>0</sup> 17

#### DON'T FORGET ABOUT MATERIAL

- Design language impacts user perception
- Keep your apps looking modern
- Match the look and feel of the operating system
- Differentiate from iOS

#### QUESTIONS





Picture Source: http://developer.android.com