BUILDING GREAT APPS WITH REAL-WORLD TESTING AND AUTOMATION
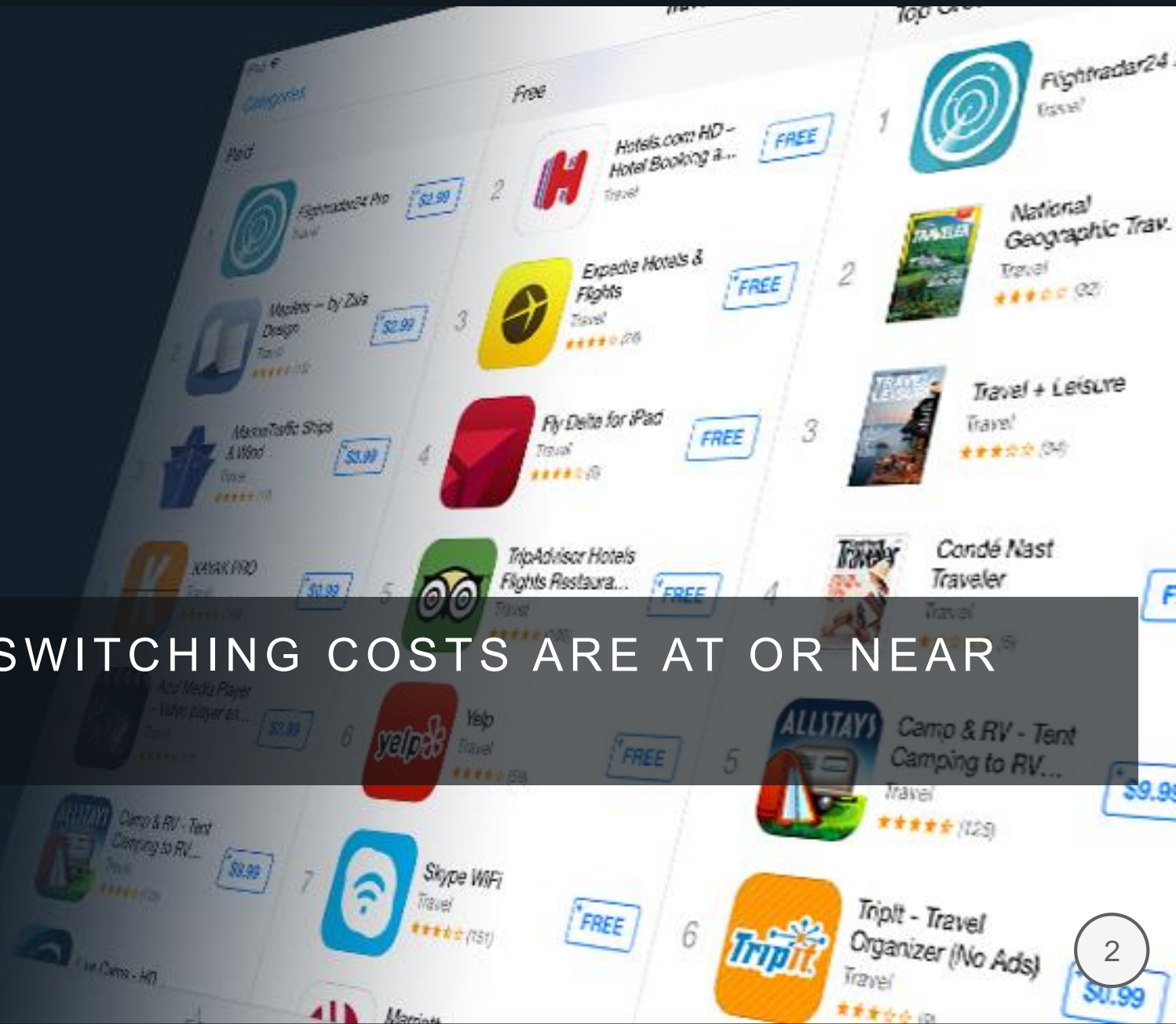
INCREASING APP QUALITY WITHOUT SACRIFICING VELOCITY

Steve Moses | Senior App Quality Evangelist
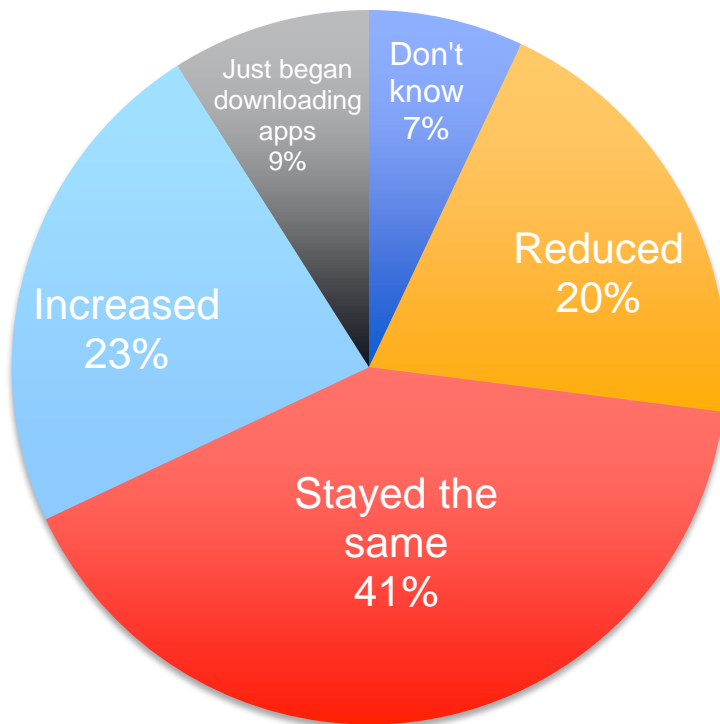
AND…SWITCHING COSTS ARE AT OR NEAR ZERO

2

APPLAUSE®

THEY HAVE TO DELIGHT USERS

3

APPLAUSE®

User App Download Habits Compared to a Year Ago (US)

Don't know 7%

Reduced 20%

Just began downloading apps 9%

Increased 23%

Stayed the same 41%

"I enjoy finding and trying new apps" (US)

44%

48%

8%

Agree

Neither Agree or Disagree

Disagree

★ ☆ ☆ ☆ ☆
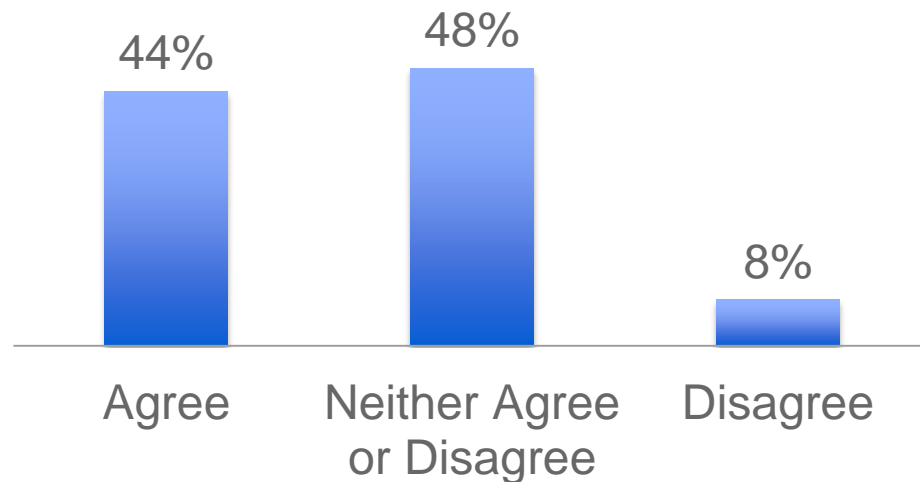
6/24/2015   Francesca Balogh -

This sucks This doesn't work. At all. I followed the instructions on the tutorial. Does not work. I have a Samsung Galaxy s5.

★ ☆ ☆ ☆ ☆

6/22/2015   Chaz Ward -

Sucks doesn't even pretend to work

★ ☆ ☆ ☆ ☆

6/22/2015   Sally P -

Did not work.

★ ☆ ☆ ☆ ☆

6/21/2015   Jeff Harvey -

Can't calibrate or scroll Can't give any less than one star or I would

APPLAUSE®

Version	Codename	API	Distribution
2.2	Froyo	8	0.3%
2.3.3 - 2.3.7	Gingerbread	10	5.6%
4.0.3 - 4.0.4	Ice Cream Sandwich	15	5.1%
4.1.x	Jelly Bean	16	14.7%
4.2.x		17	17.5%
4.3		18	5.2%
4.4	KitKat	19	39.2%
5.0	Lollipop	21	11.6%
5.1		22	0.8%
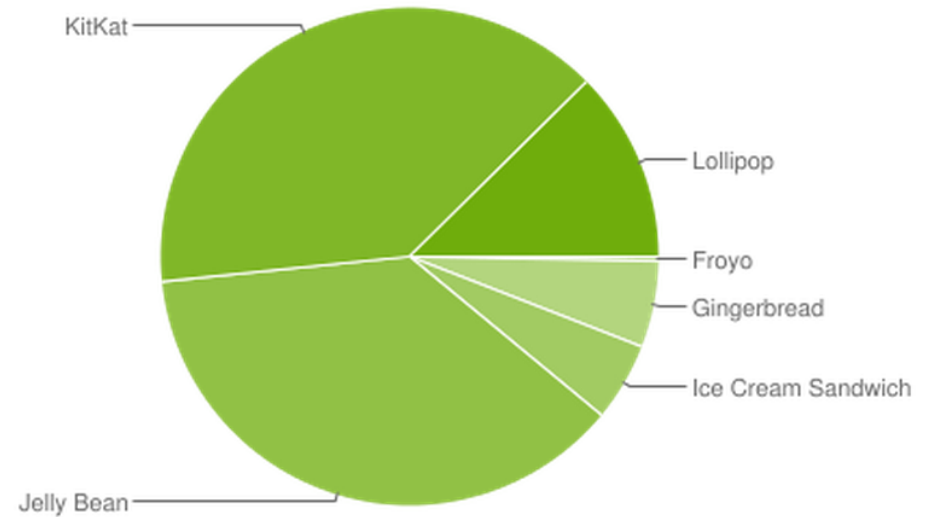
Data collected during a 7-day period ending on June 1, 2015.

Any versions with less than 0.1% distribution are not shown.

https://developer.android.com/about/dashboards/

APPLAUSE®

25%

The State of Mobile App Development
https://www.forrester.com/The+State+Of+Mobile+App+Development/quickscan/-/E-RES120267

WITHOUT SACRIFICING VELOCITY

Product/Marketer   **Developer**   **Tester**   **End Users**

APPLAUSE®

TOOLS OF THE APP DEVELOPER TRADE

Tools let you do more with less, use them or be left behind

LARGEST EVER · 10,000+ APP DEVS · APP DEV SURVEY

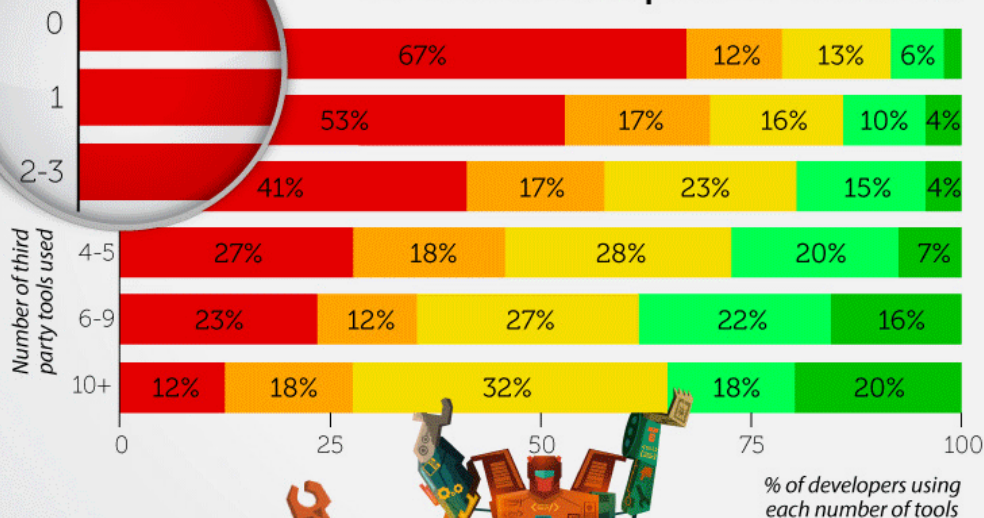All of the 10 most popular third party tools categories have options for a developer to get started for free.

Despite this fact, **26%** of developers interested in making money do not use any third party tools.

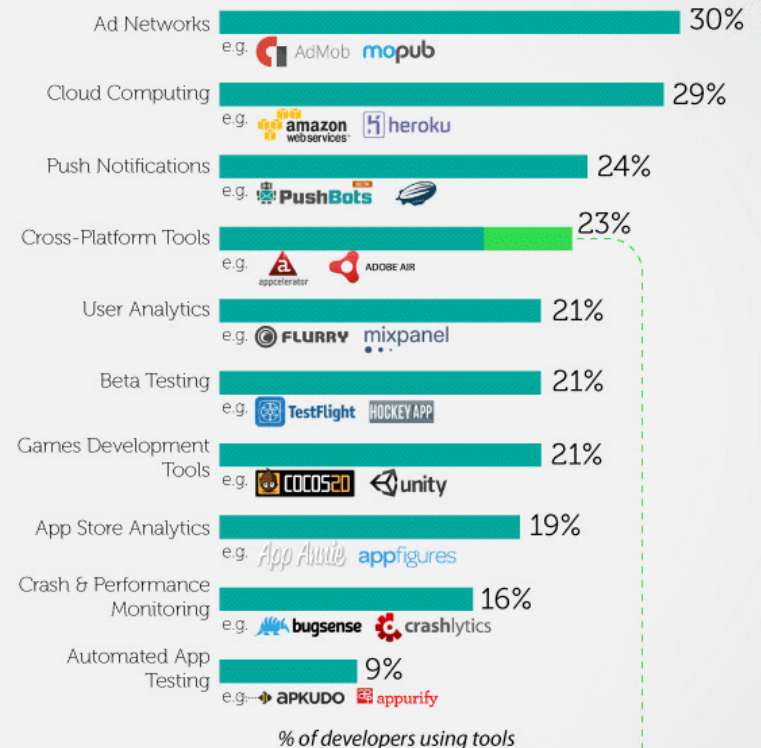Of those developers **79%** make less than $500 per app per month.

The average developer uses just **2** tools.

- ■ <$100
- ■ $100-500
- ■ $500-5000
- ■ $5-50K
- ■ $50K+

Successful developers use more tools

Number of third party tools used

0	67%	12%	13%	6%
1	53%	17%	16%	10%	4%
2-3	41%	17%	23%	15%	4%
4-5	27%	18%	28%	20%	7%
6-9	23%	12%	27%	22%	16%
10+	12%	18%	32%	18%	20%

0 25 50 75 100

% of developers using each number of tools

10 Most Popular Third Party Tool Categories

Ad Networks	30%
e.g. AdMob mopub	
Cloud Computing	29%
e.g. amazon web services, heroku	
Push Notifications	24%
e.g. PushBots	
Cross-Platform Tools	23%
e.g. appcelerator, ADOBE AIR	
User Analytics	21%
e.g. FLURRY mixpanel	
Beta Testing	21%
e.g. TestFlight HOCKEYAPP	
Games Development Tools	21%
e.g. COCOS2D, unity	
App Store Analytics	19%
e.g. App Annie appfigures	
Crash & Performance Monitoring	16%
e.g. bugsense crashlytics	
Automated App Testing	9%
e.g. APKUDO appurify	

% of developers using tools

Wrong tool for the job?

26% of Cross-Platform Tool users only target **1** platform. By doing so they get all the disadvantages without the main benefit. They are amongst the lowest revenue earners of all tool users.

10

APPLAUSE®

CONDITION	1.639s	power:
		bat
		sta
INFO	1.73s	**Unsupported**
		»
INFO	1.733s	**Unsupported**
		»
CRASH	7.412s	**Application**

Incident Id
CrashReport
Hardware Mo
Process:
Path:
Identifier:
Version:
Code Type:
Parent Proc

Date/Time:
OS Version:
Report Vers

Exception T
Exception C
Crashed Thr

Thread 0 Cr
0   libobjc
1   CoreUI
2   CoreUI
3   UIKit
4   UIKit
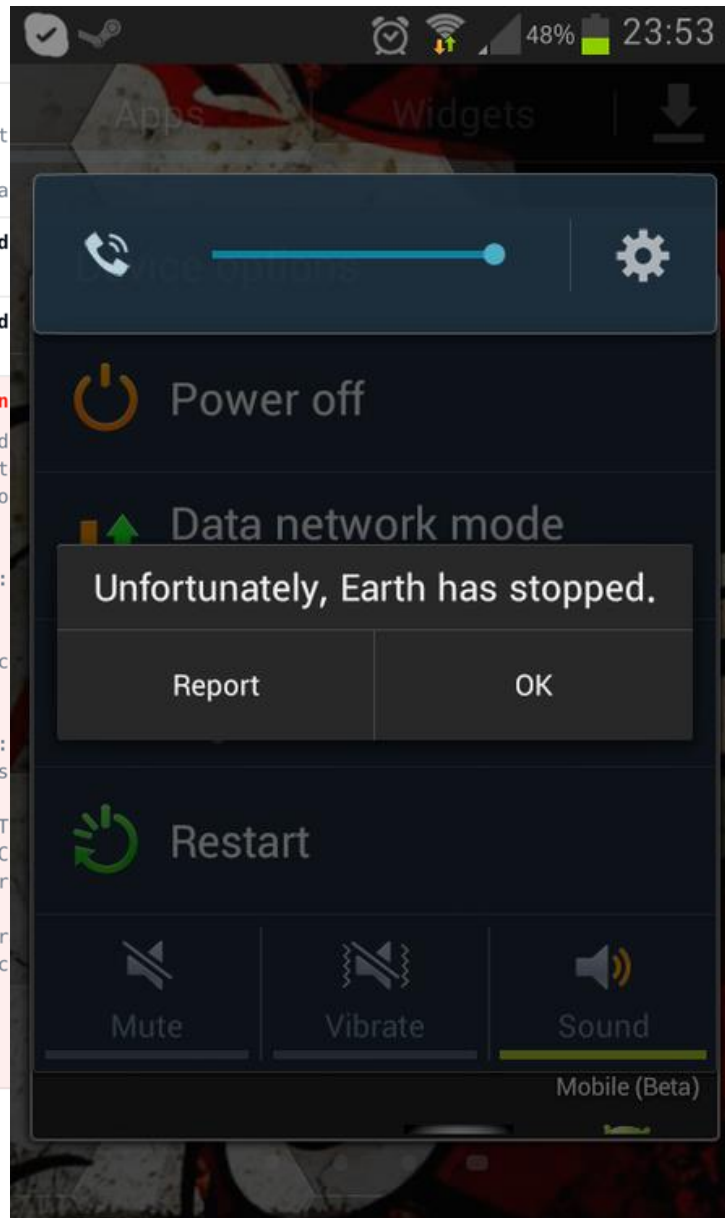
34424/MyNetwork.app/MyNetwork

eNamed:scale:idiom:subtype:cachingOptions:] + 260
eNamed:scale:idiom:subtype:] + 38

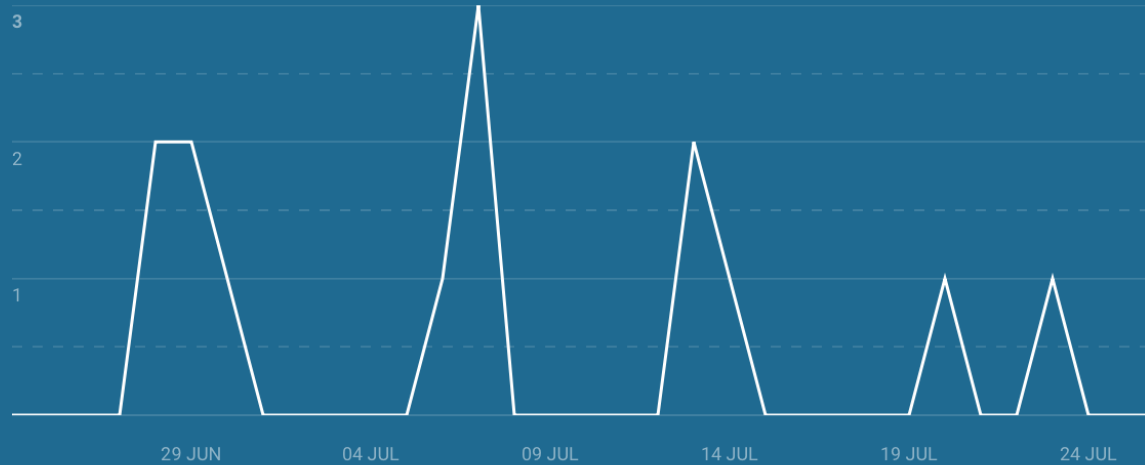Unfortunately, Earth has stopped.

11

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- **Real people, with real devices, under real world conditions**
  - **Device coverage, network conditions, interoperability**
    - **Test cycles can be completed in days**

BETA TESTING

APPLAUSE®

APP LAUNCHES

3

2

1

29 JUN   04 JUL   09 JUL   14 JUL   19 JUL   24 JUL

3.0
Avg. Feedback Score

6
Bugs Reported

0
Crashes Occurred

BUGS & CRASHES

HOVER ON CHART AREAS TO GET MORE INFORMATION.

Bugs
5 on 3.3.3 (3.3.4)

7

6

5

4

3

2

1

3.3.3 (3.3.4)
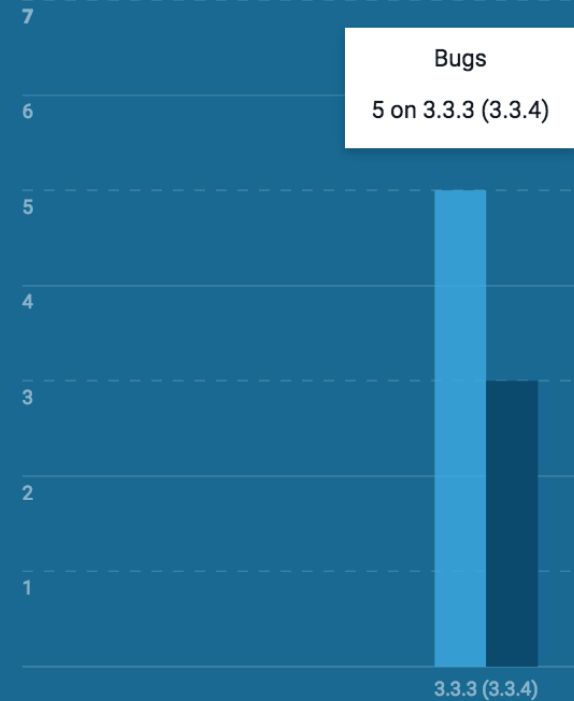
FEEDBACK   1min 0.273s   Rating: 3/5
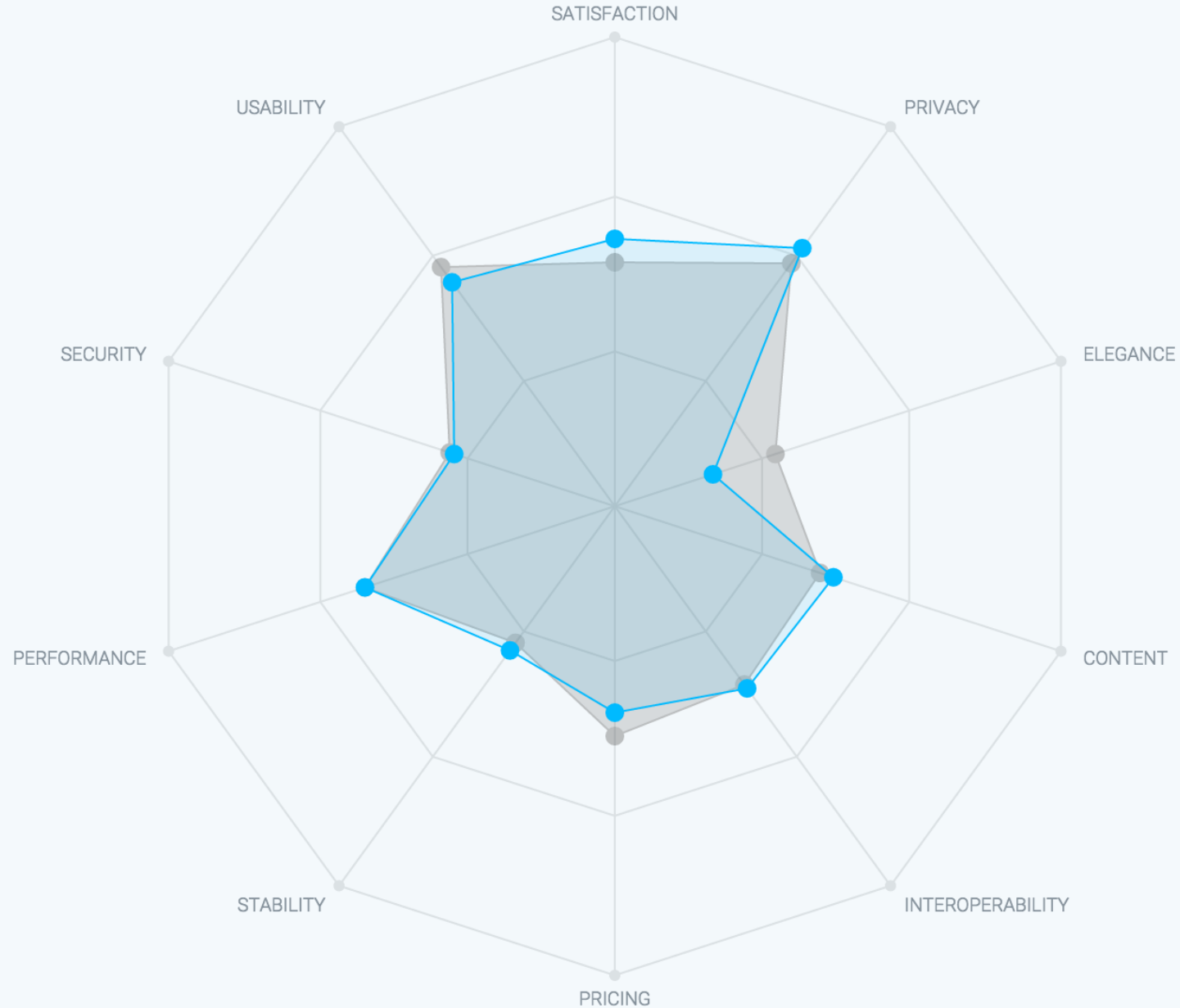Would prefer different colors and tutorial screen.

My Network

Marc Frazier

Frederick Lopez

Suzanne Knight

Deann Murray

Doris Watson

Brad Cole

Carla George

Powered by: randomuser.me

SATISFACTION

PRIVACY

USABILITY

ELEGANCE

SECURITY

CONTENT

PERFORMANCE

INTEROPERABILITY

STABILITY

PRICING

15

- **Instrument app for session/crash reporting**

- **Leverage CI practices - build often and run test suites**

- **Use manual testing techniques that can fit into compressed timelines**

- **Test on real devices and real-world conditions**

- **Verify with your actual users in beta tests**

- **Review trends (problem devices, areas of the app that fail more often, etc.) and user sentiment**

USE THE TOOLBOX

QUESTIONS?

● ● ●

APPLAUSE
WINNING APPS GET IT