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CONFERENCE

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Launch High-Performing Mobile Apps with Appurify

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About Appurify

- Mission to create comprehensive mobile application lifecycle management platform
- Founded in early 2012
- Backed by Google Ventures, Foundation Capital, Radar Partners, Caffeinated Capital, Felicis Ventures, and others
- ~20 person engineering focused team in San Francisco, and we're hiring!

App quality at launch drives eventual ROI

Mobile app market is exploding, but app discovery lags

- 23% of apps are only opened once
- 83% of iPhone users don't scroll beyond the top 50 apps

It's not just the cost to build an app – marketing counts too

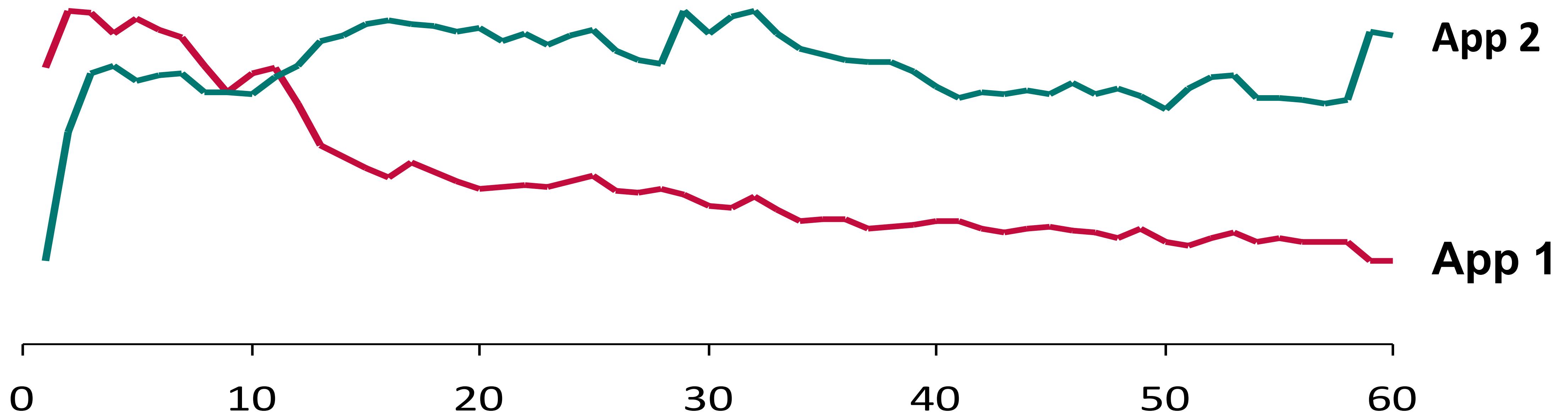
- 80-90% of total app marketing spend is typically spent in the first 1-2 weeks post launch

You only get one chance to succeed – at launch

- A 5-star app makes 6x as much money as a 3-star app on average

Example: Users punish apps with bugs

DAU by days post launch



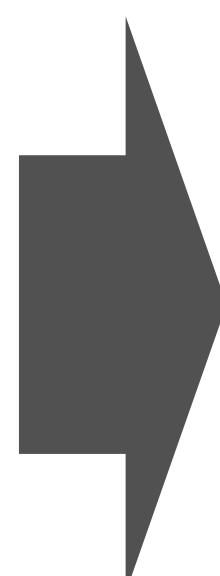
*Stability,
performance,
and quality*



*Retention and
ratings*



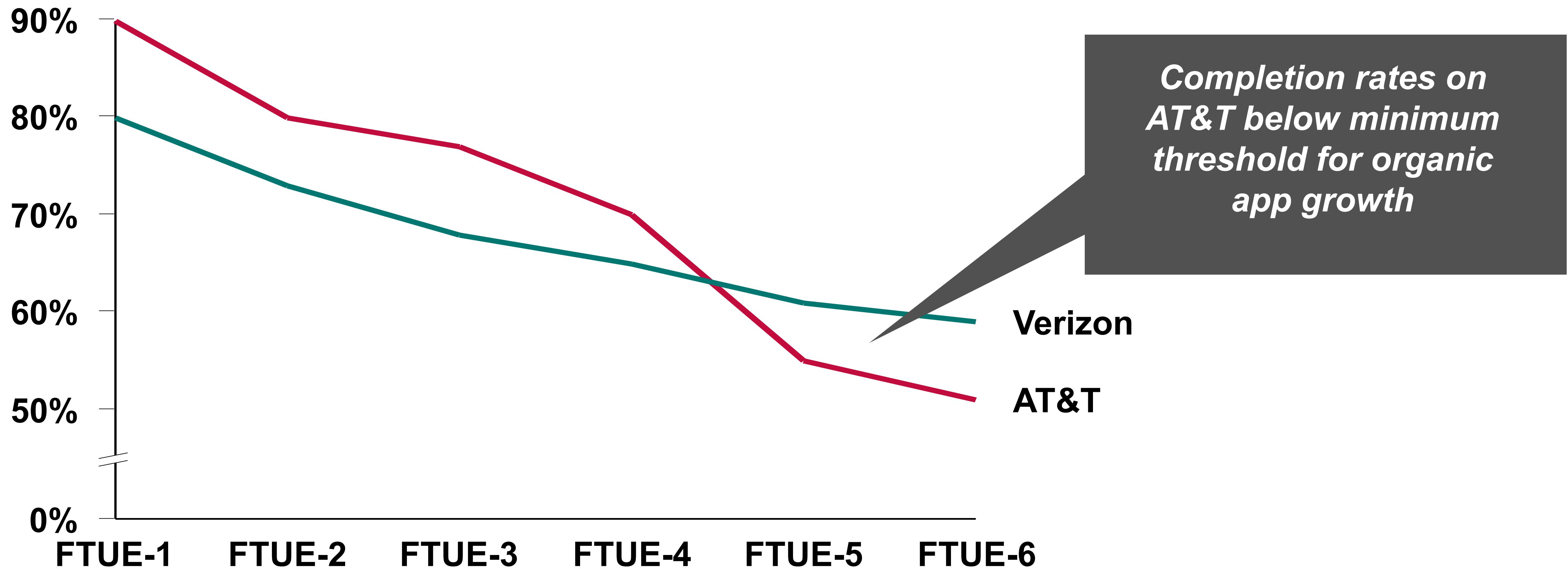
*DAU and
installs*



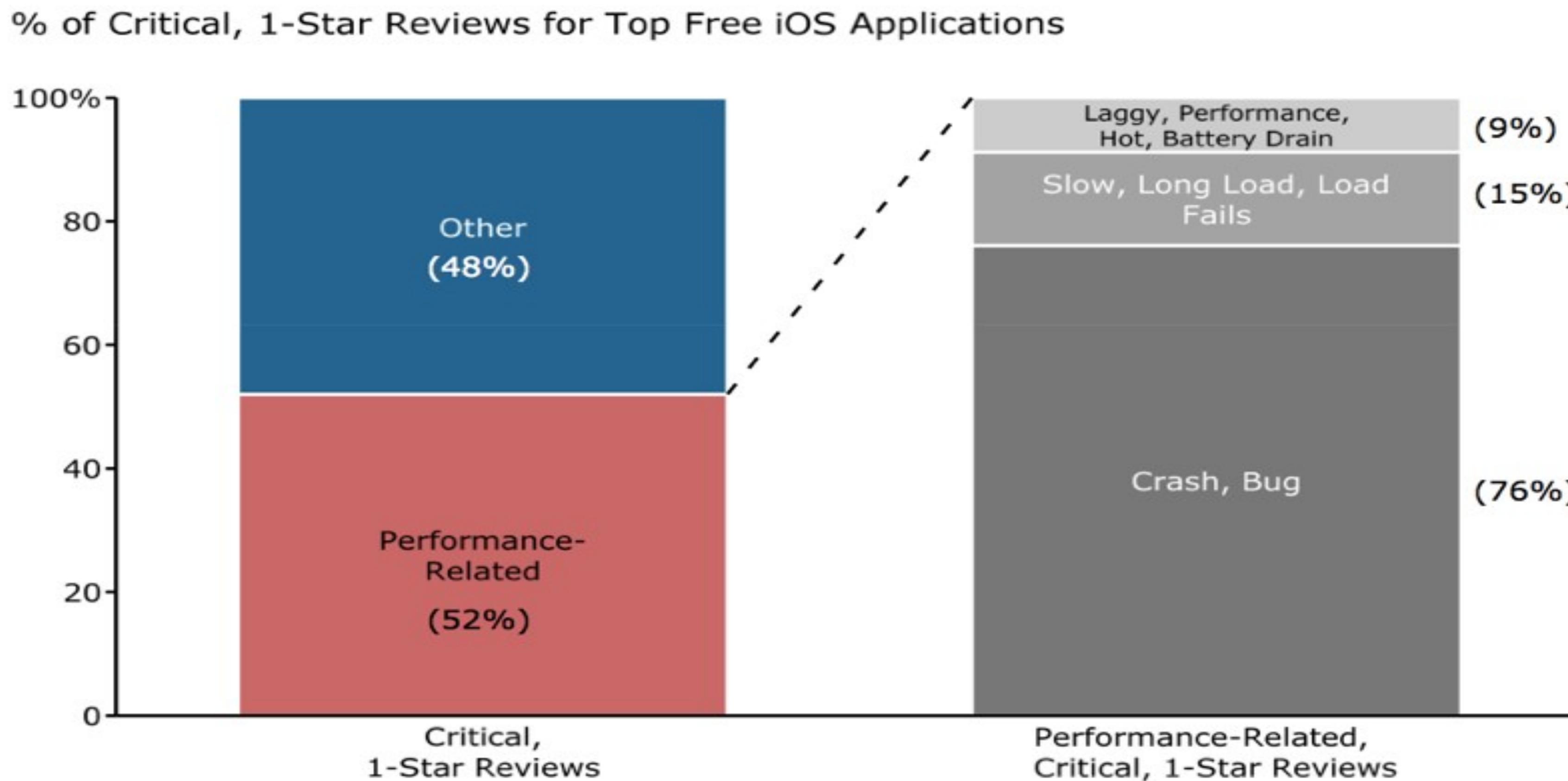
Revenue

Why App I failed – not optimized for real user conditions

FTUE completion rates for the same app on AT&T vs. Verizon



Stability, network and client-side performance are the main drivers of poor ratings



Source: Appurify Analysis of Top 200 free Apps in App Store in May 2013

Developers and enterprises know the importance of app quality, but lack mobile focused tools

Coding is getting easier.
Debugging is hard

- Very few resources to easily debug mobile apps
- Proliferation of 3rd party add-ons and off-the-shelf coding components
- Even more difficult when integrating across multiple developers/releases

You don't know where your app
is going to go

- Unclear performance under real user or network conditions
- New constraints like network availability/battery life/responsiveness
- Can't manually test across all device/network conditions

Throwing bodies at the
problem is the only option

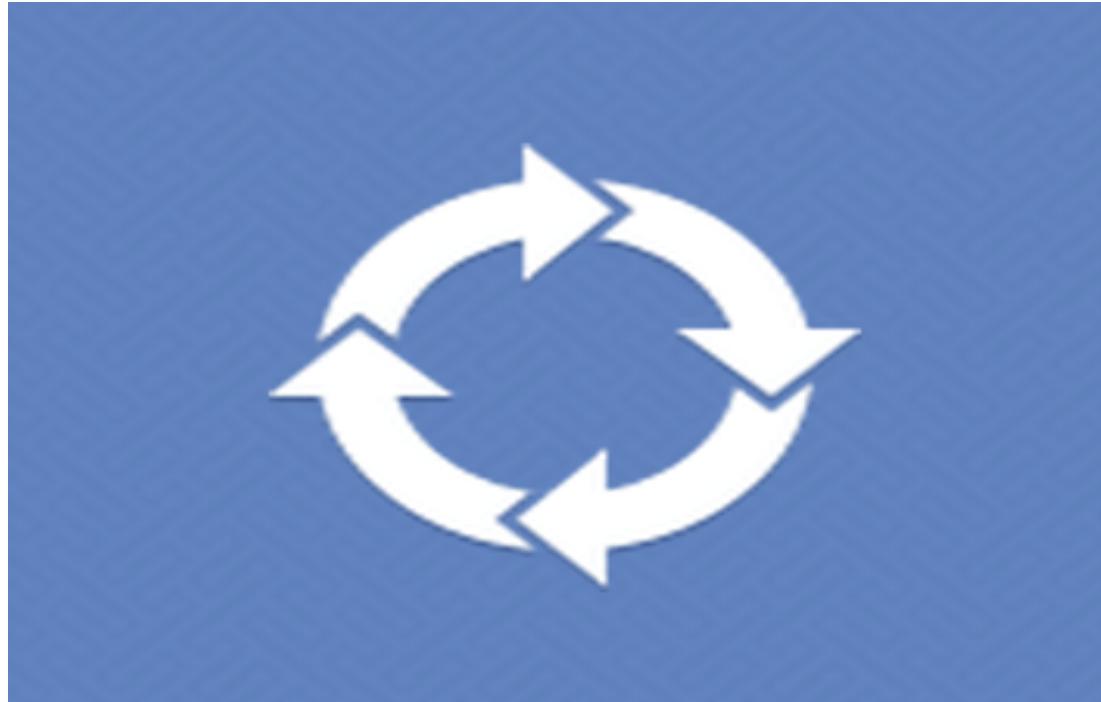
- Only option is to spend significant expensive dev time debugging, or hire an army of QA
- Even if you find a bug, and you can reproduce it, dev-QA cycle time consuming

Appurify has built a mobile continuous integration platform to address these issues

- Our platform supports optimization of all types of apps - HTML5, Native iOS and Android, Hybrid, Web Apps, and Browsers
- Most powerful run-time debugging tools for mobile
- Robust performance optimization tools
- Allows automated mobile testing on real devices under real user conditions, resulting in actionable outputs instantaneously

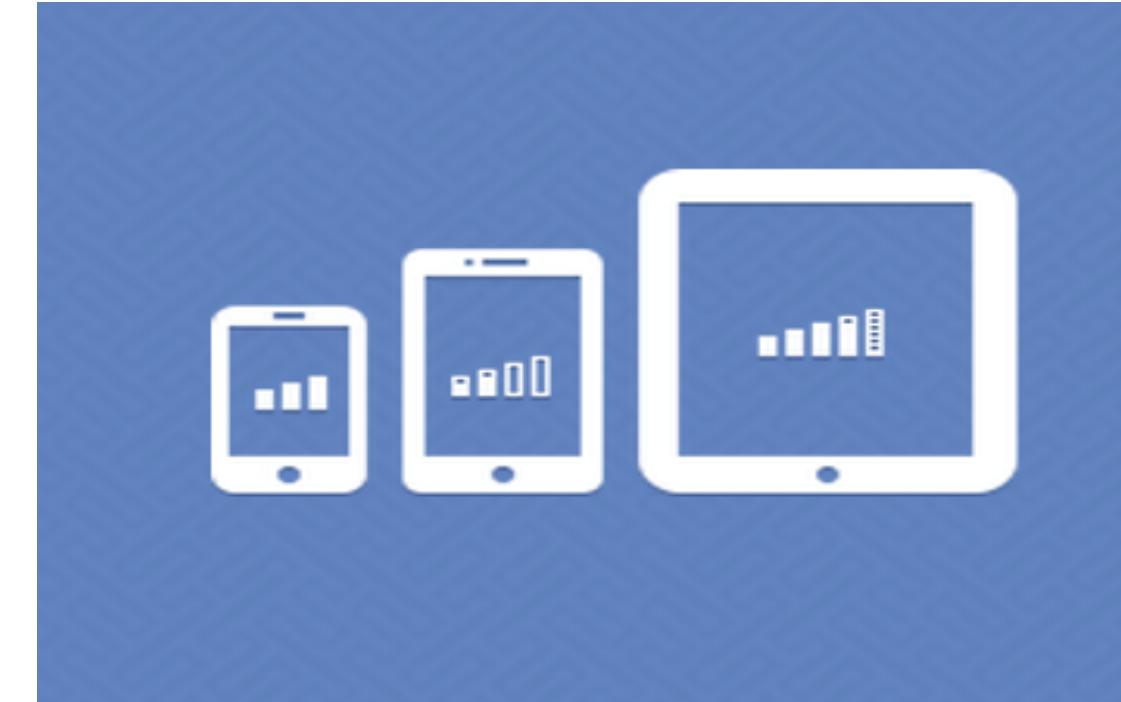
Launch bug-free, performance optimized apps and mobile web pages

Introducing the four key pillars of the Appurify solution



Robust automation

- Appurify provides best in class continuous integration
- Use existing test frameworks or our intuitive scriptless one



Real Devices & Conditions

- Test on real iOS and Android devices
- Devices are fully configurable: network, OS, location, accelerometer, etc.



Actionable Results

- Screencasts, symbolicated crash reports, optimized network captures, test results, performance data, debug data

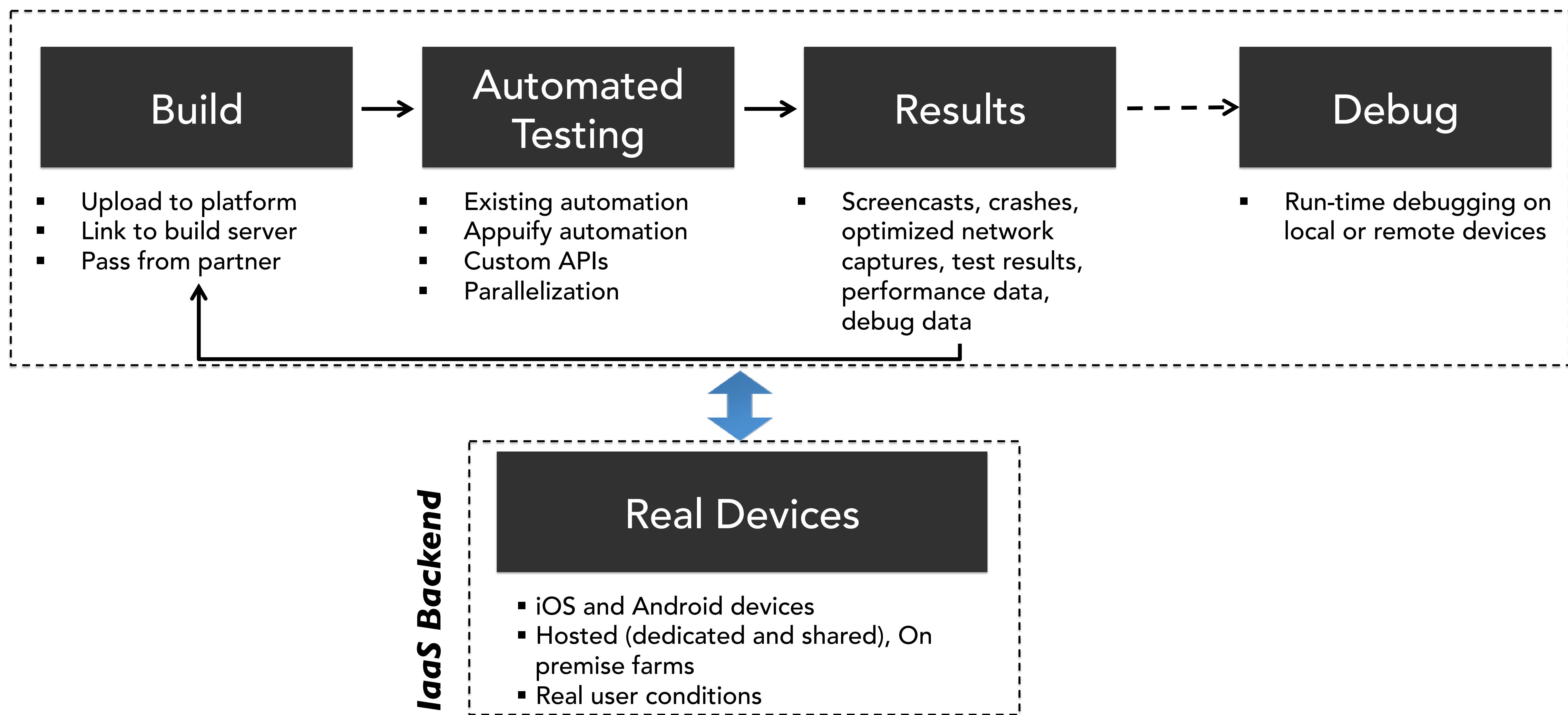


Runtime Debugger

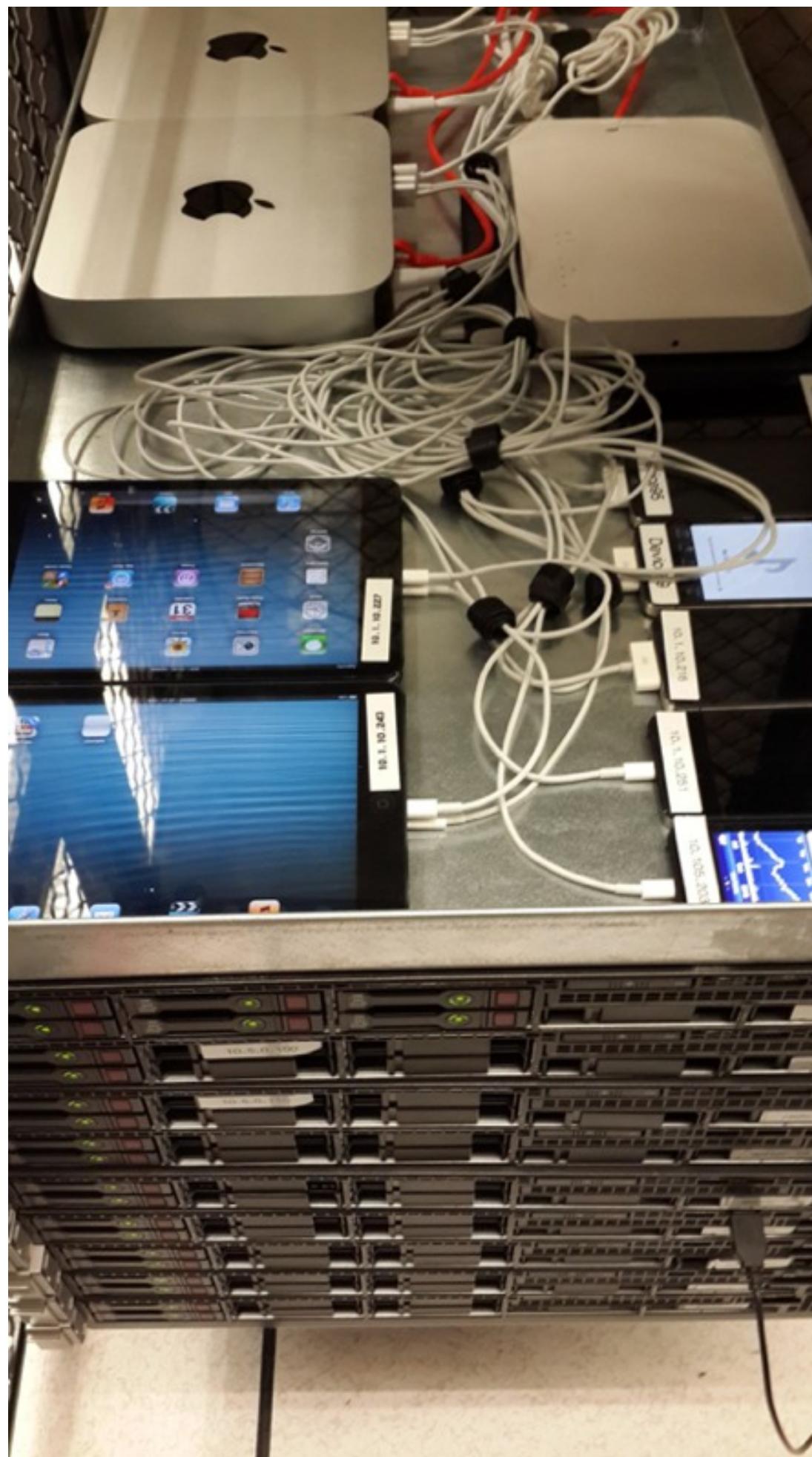
- Inspect native and HTML5 apps on real devices (think Firebug for real apps on real devices)

Overview of the Appurify platform

CI Platform



We have built an API-accessible, scalable device farm – EC2 for mobile!



- Completely API accessible
- 1000s of mobile devices (iOS and Android)
- Private, dedicated, or shared device clouds
- Dynamic addition, removal and provisioning of devices
- Simulate carrier networks and signal strengths at the packet level
- Simulate location, accelerometer, gyroscope, magnetometer events, device memory
- >12M automated runs – 1 every 2 seconds!
 - Runs can be performance measurement or testing

We enable 6 levels of performance measurement, debugging, testing and optimization

1. Client side

Load times,
view rendering,
time to interact,
gesture
response

2. Internal app mechanics

ObjC call tracing, memory leak detection, function profiling, OpenGL ES tracing

3. Server side

HTTP/HTTPS network tracking, PCAP capture

4. Device side

CPU, memory, Battery, Thermal, crash reports, data usage, radio resource control, FPS

5. On-disk

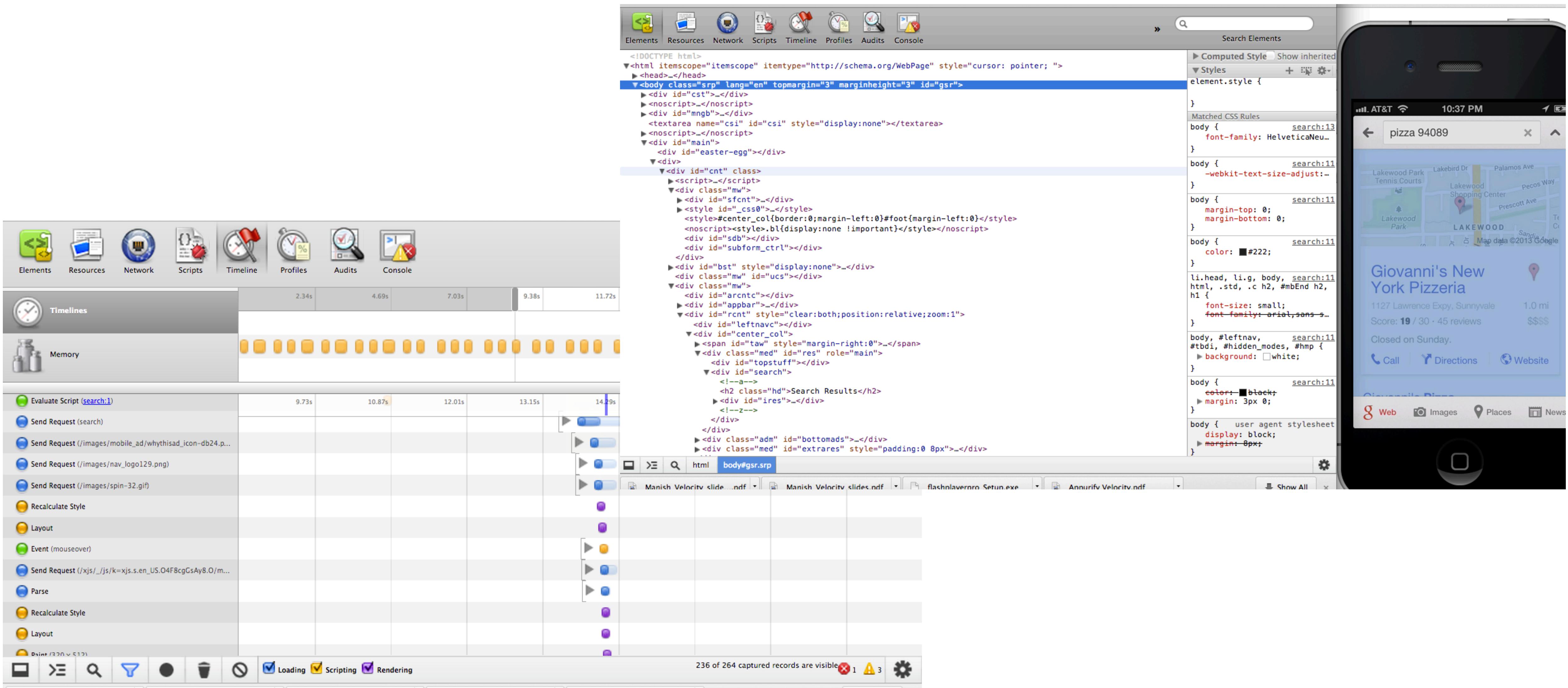
Caching, cookies, resources and temp files

6. Multi-app interaction

Context switching between multiple apps, inter-app interaction and automation

Enabled for all native, hybrid, and HTML5 apps, and all mobile browsers including Chrome, Safari, Mercury, UIWebView, Yahoo Axis, etc

First run-time debugger for HTML5 apps



Run-time debugging for native apps

The screenshot shows the Chrome DevTools interface for an iOS application. The top navigation bar includes tabs for Elements, Resources, Network, Sources, Timeline, Profiles, Audits, and Console. The Elements tab is active, displaying a hierarchical tree of UI components. A specific element, a UITabBarButton, is selected and highlighted with a blue background. The tree view shows various views, including UIWindow, UILayoutContainerView, UITabBar, and UITabBarButton, with detailed properties like frame, hidden, alpha, and opaque values. To the right of the tree view is a panel with tabs for Computed Style, Styles, Metrics, Properties, DOM Breakpoints, and Event Listeners. On the far right, a preview window displays the Walmart mobile website on an iPhone. The preview shows the Walmart logo, a search bar, and a "Spring into action" banner featuring children playing on a playground. At the bottom of the DevTools interface, there are tabs for iosml, window.UIWindow, viewUILayoutContainerView.(WMOnlineModeTabBarController), view.UITabBar, and view.UITabBarButton, with the view.UITabBarButton tab currently selected.

Super charge app development with our SDK

- Use your own mobile device
- Runtime debugging using familiar Chrome dev tools and Safari dev tools
- Performance optimization
- Create automated tests by interacting, replay and manage test cases
- Run them continuously on appurify cloud
- Videos, logs, screenshots, crash reports, network captures, and more

We are distributing our SDK for free!
www.github.com/appurify

Automate testing across devices, operating systems and networks

Test your apps on devices/operating systems/networks in parallel to identify

- Stability issues with crash reports and logs
- Network performance opportunities with waterfalls, and targeted improvement suggestions
- Performance improvement opportunities including CPU, memory, battery consumption, and detailed logs

Automate testing of your apps on real devices with

- *Appurify Robot:* Stress test for your app
- *Appurify Automation:* Manually interact to create an automation script that can be replayed on the Appurify cloud
- *Support for all common iOS and Android automation frameworks on real devices:* Including KIF, Calabash, UI Automation, Appium, Robotium, Selenium, UI Automator, etc.

Demo!

Get in touch with Appurify to try it out!

- www.appurify.com
- Contact info@appurify.com, manish@appurify.com, or jay@appurify.com and try out a pilot implementation of Appurify