

Combine the web with hardware, apps and native platforms

maximiliano @firtman



 modev
CON

Washington DC, Dec 11 2014

trainer



YAHOO!



Linked **in**



PEARSON

DÉVELOPPER POUR LE

WEB MOBILE

Référence

O'REILLY

Mobil Web Programlama

MAXIMILIANO FIRTMAN

PUSULA



移动网络程序设计

Maximiliano Firtman 著
王斌 译

清华大学出版社



O'REILLY

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ЧИТАЙ

Веб-программирование

для мобильных устройств



实践 jQuery Mobile

Maximiliano Firtman 著
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O'REILLY



jQuery Mobile 建置與執行

Firtman O'REILLY

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jQuery Mobile 即学即用

Maximiliano Firtman 著

人民邮电出版社



jQuery Mobile: Up and Running

Firtman

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jQuery Mobile. Aplicaciones HTML5 para móviles



Programmare per il Web Mobile

Firtman

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Programming the Mobile Web

Firtman

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SECOND EDITION

Programming the
Mobile Web

Firtman

O'REILLY

Using HTML5 to Design Web Apps for Tablets and Smartphones



jQuery Mobile

Up and Running

O'REILLY®

Maximiliano Firtman

*Reaching Users on iPhone, Android,
BlackBerry, Windows Phone, and more*

2nd Edition
Includes HTML5



Programming the

Mobile Web



O'REILLY®

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NEW!



Mobile HTML5

Maximiliano Firtman

VIDEO

O'REILLY®

SOON!

High Performance Mobile Web

BEST PRACTICES FOR OPTIMIZING
MOBILE WEB APPS



Maximiliano Firtman

MOBILE HTML



beta, of course

0
0
0
Like
+1
Tweet

Do not program conditionals per platform or version. Always use feature detection.

This list is in progress. New tests, new features, more specificity of each feature and more mobile browsers soon!

If you want to help on the test, [contact me](#).

by [firt](#) | [Updates on Twitter](#) | [Blog](#)

Trying to understand HTML5 compatibility on mobile and tablet browsers

Feature	Safari on iOS	Android Browser		BlackBerry Browser		Internet Explorer	Opera		Firefox	webOS Browser	Symbian Browser
	iPhone, iPad	Phones (1.0-2.3)	Tablets (3.0+)	Phones	Tablet	Windows Phone	Mobile	Mini	Android		Nokia phones
Version tested											
Minimum version tested	3.2	1.5	3.0	5.0	1.0	9	11	5	6	1.4	^3
Application Cache <u>W3C API</u> Offline package installation.	✓	✓ 2.1+	✓	✓ 6.0+	✓		✓		✓	✓	
Web storage <u>W3C API</u> Persistent and session storage.	✓	✓ 2.0+	✓	✓ 6.0+	✓	✓	✓		✓	✓	
Web SQL storage <u>W3C API (no active)</u> Persistent SQLite storage.	✓	✓ 2.0+	✓	✓ 6.0+	✓		✓			✓	
Geolocation <u>W3C API</u> Geolocation & tracking using GPS, cells or Wi-Fi.	✓	✓ 2.0+	✓	✓ 6.0+	✓	✓	✓		✓	✓	
Multimedia <u>W3C API</u> Video & Audio Players	✓	✓ 2.3+	✓	✓ 7.0+	✓	✓	✓		✓	✓	
Server-Sent Events <u>W3C API</u> EventSource pattern to maintain the connection to the server open	✓ 4.1+						✓		✓		
Web Sockets <u>W3C API</u> Newbidirectional protocol over HTTP	✓ 4.2+			✓ 6.1+	✓		✓		✓		

www.mobilehtml5.org

Slides, links and tests

firtman.github.io/modevcon

questions

yes, please

Anytime...

We will cover...

- 1- Mobile Web today
- 2- Hardware APIs
- 3- Native integration
- 4- Webapps
- 5- Future

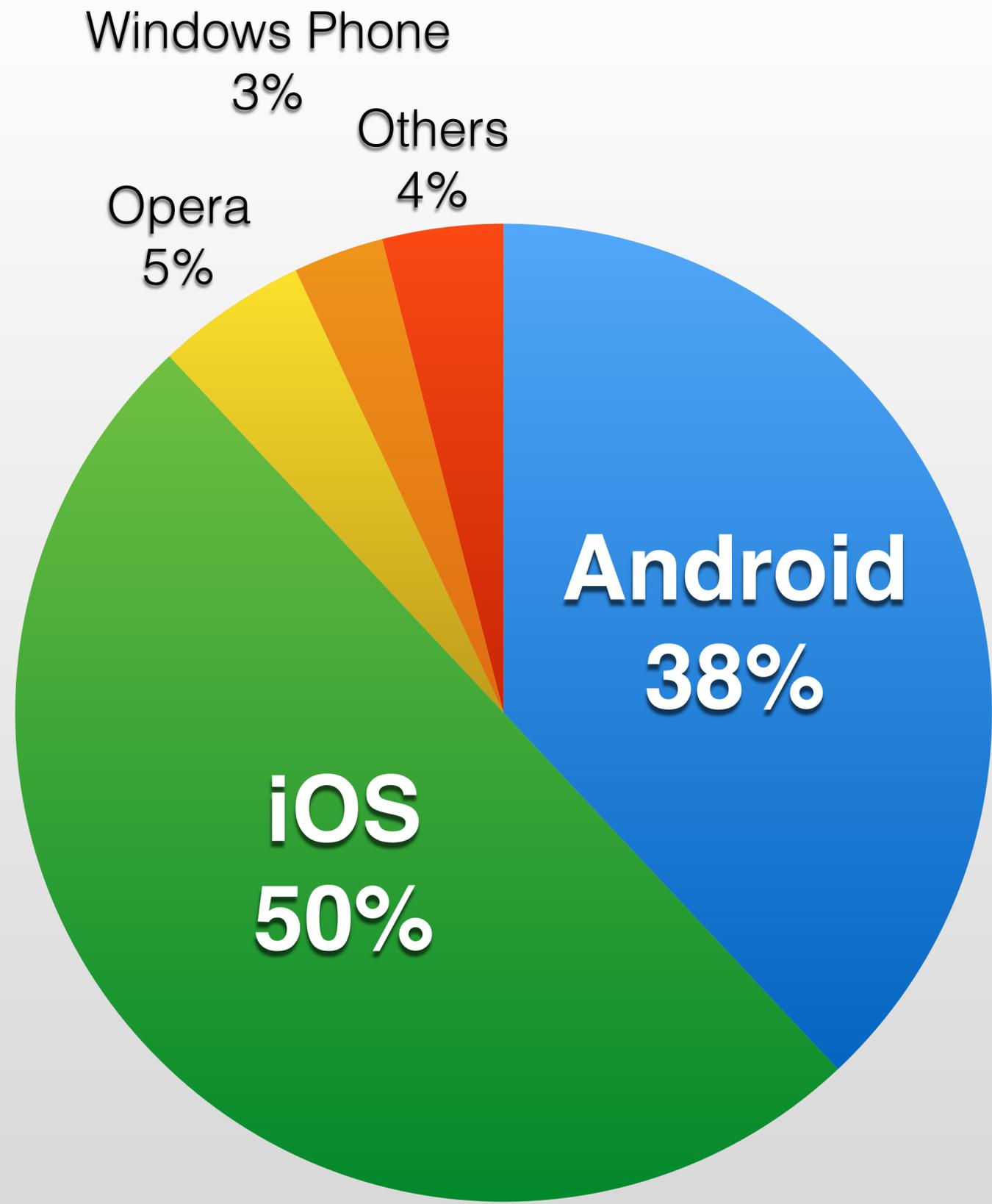


1- mobile web today*

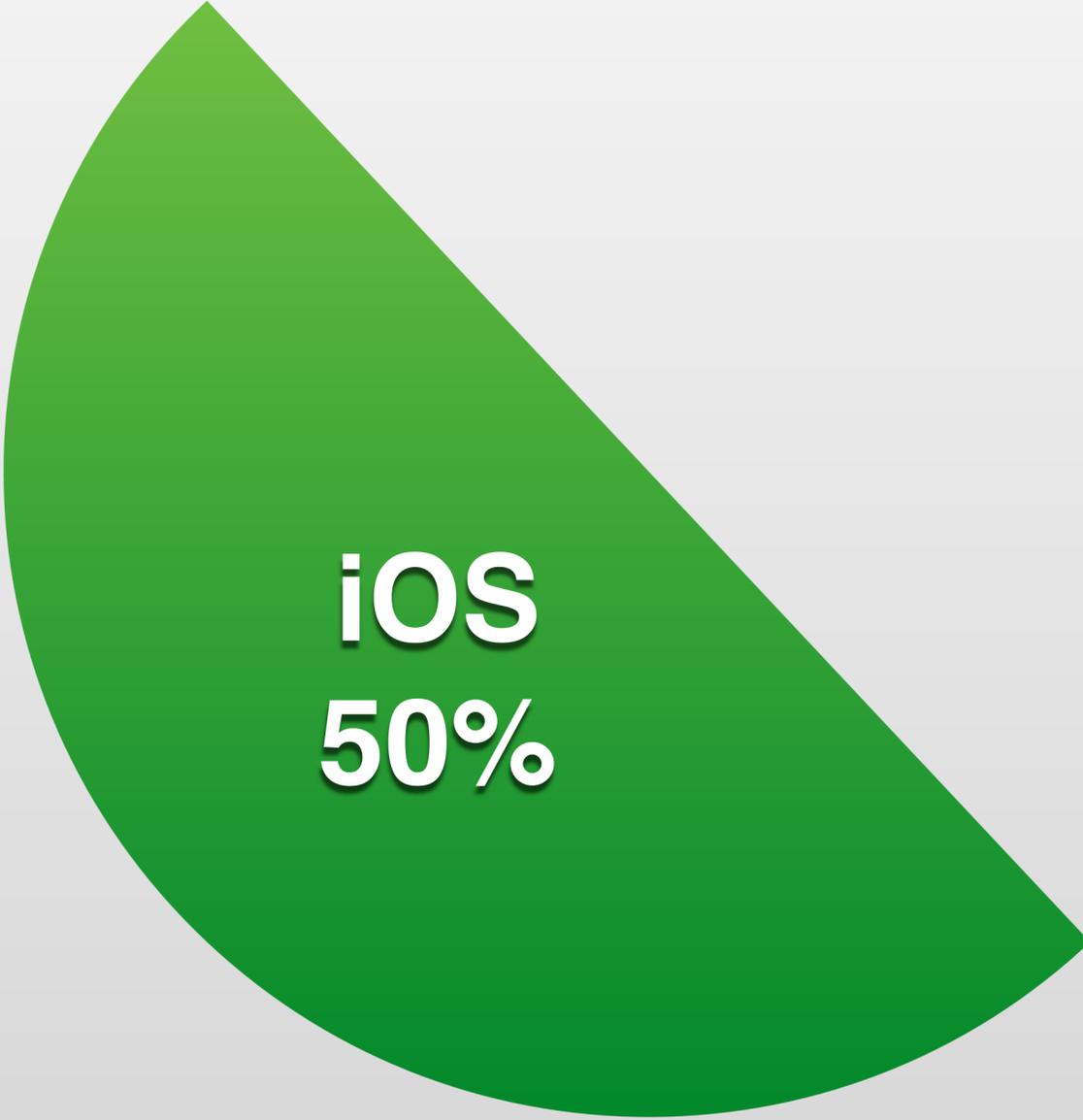
***today: december 2014**

web platforms

web platforms



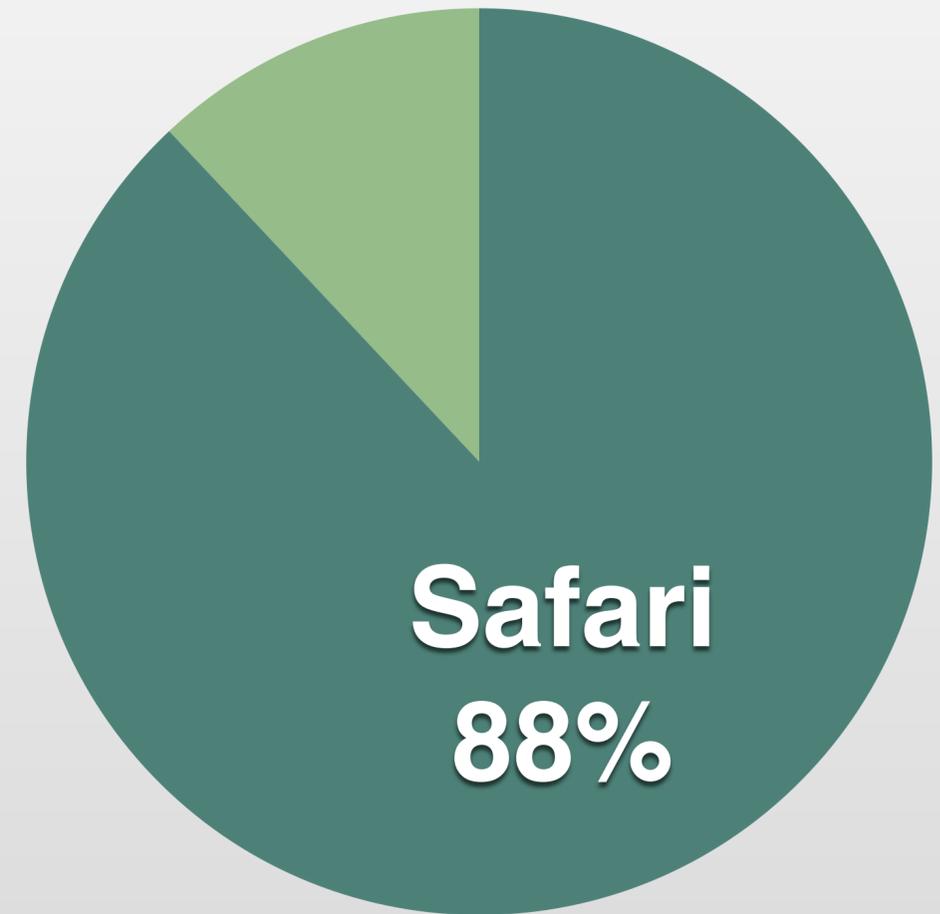
web platforms



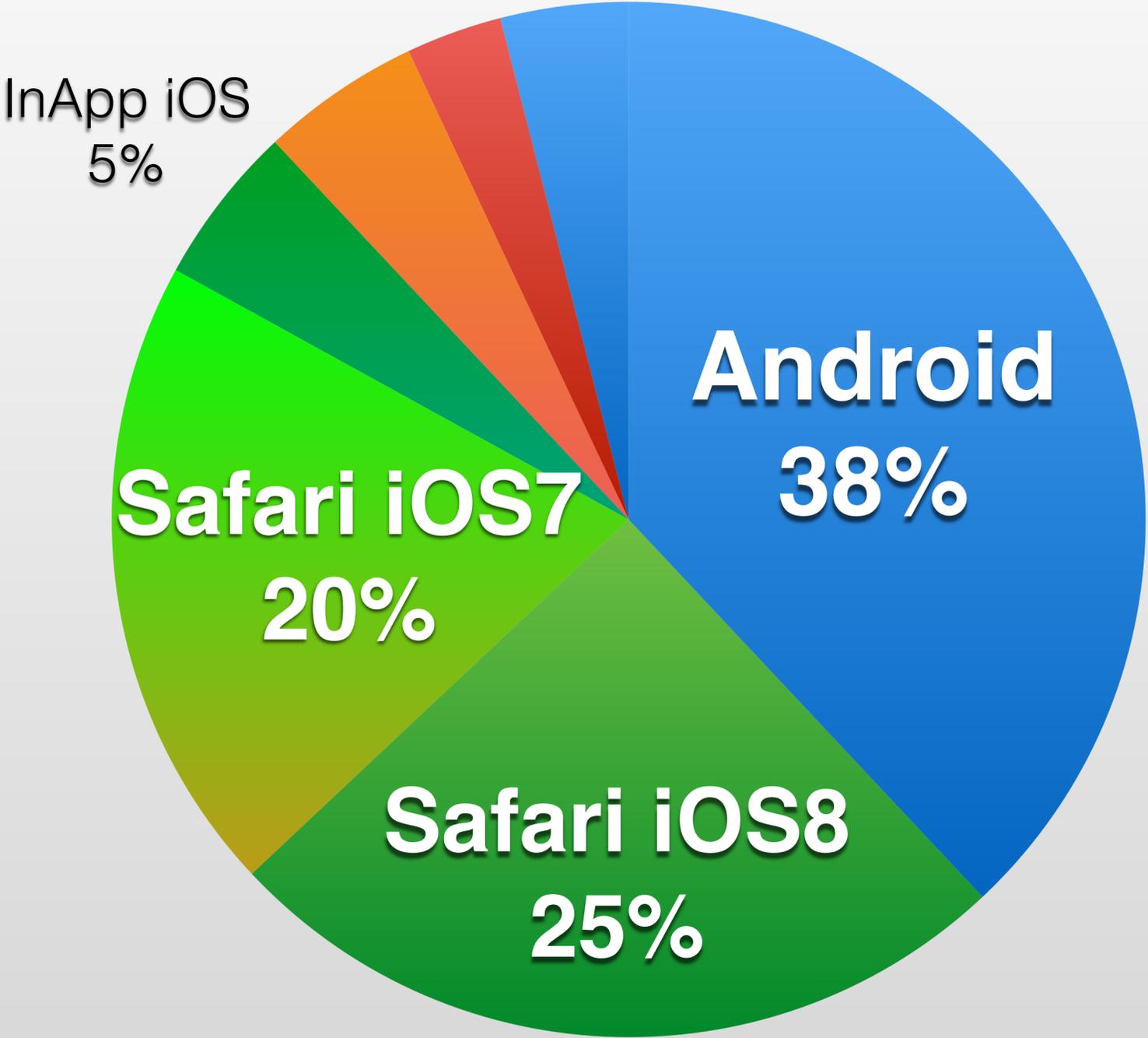
web platforms



Apps (Web View)
12%



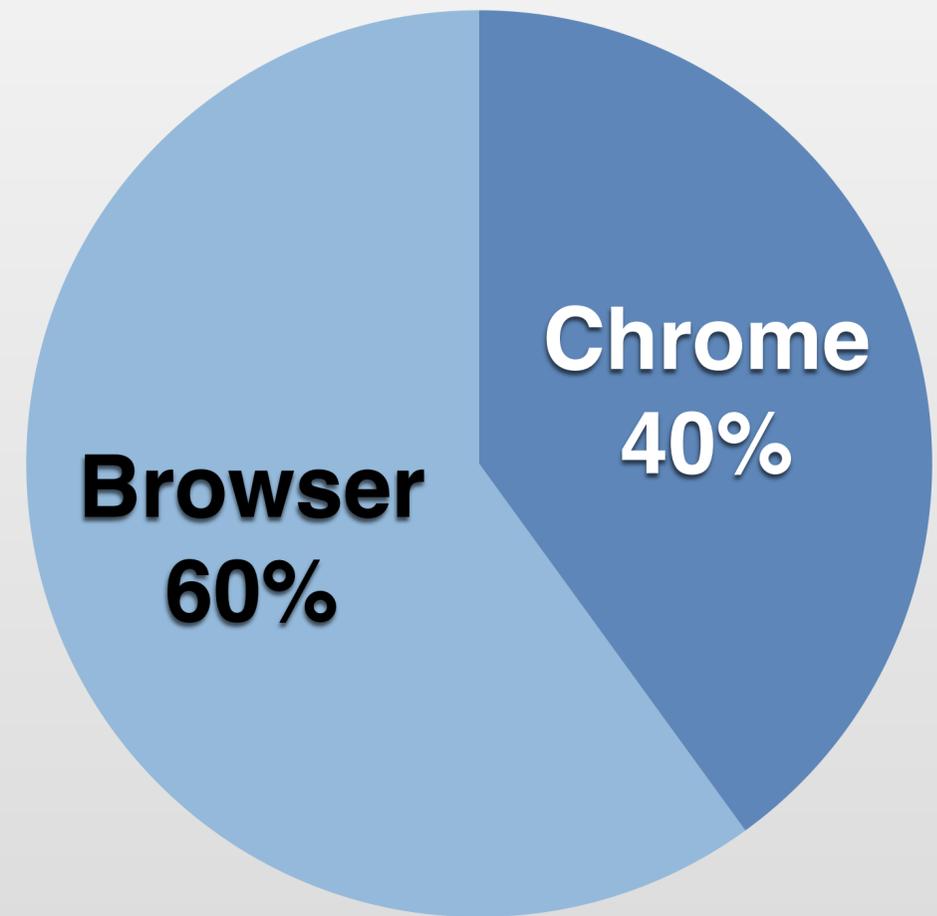
web platforms

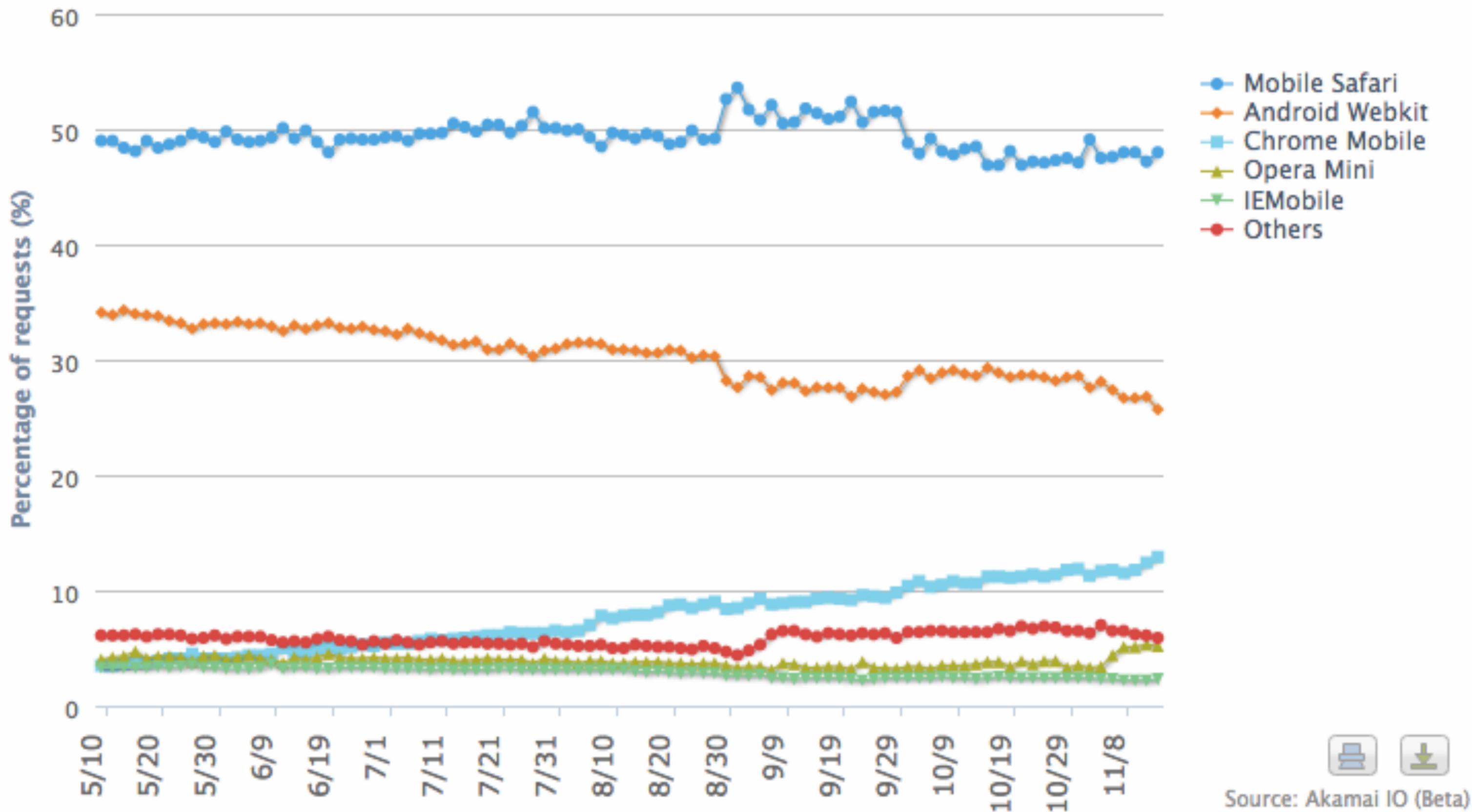


web platforms

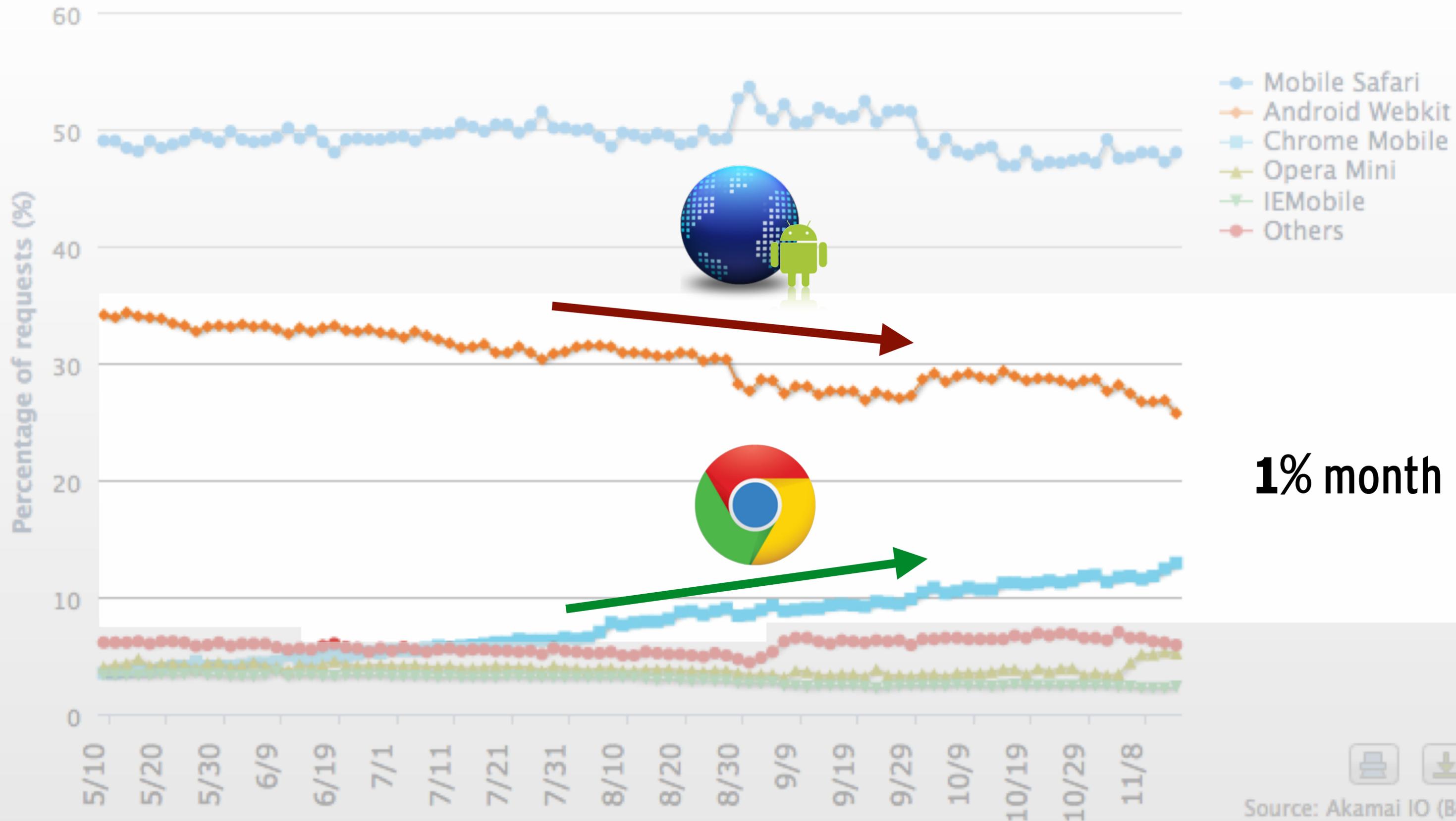


web platforms





Source: Akamai IO (Beta)



1% month



Source: Akamai IO (Beta)

your browser other browsers compare

news device lab

browsers features

Search...

BROWSERS

Select up to five browsers and compare their test results in detail



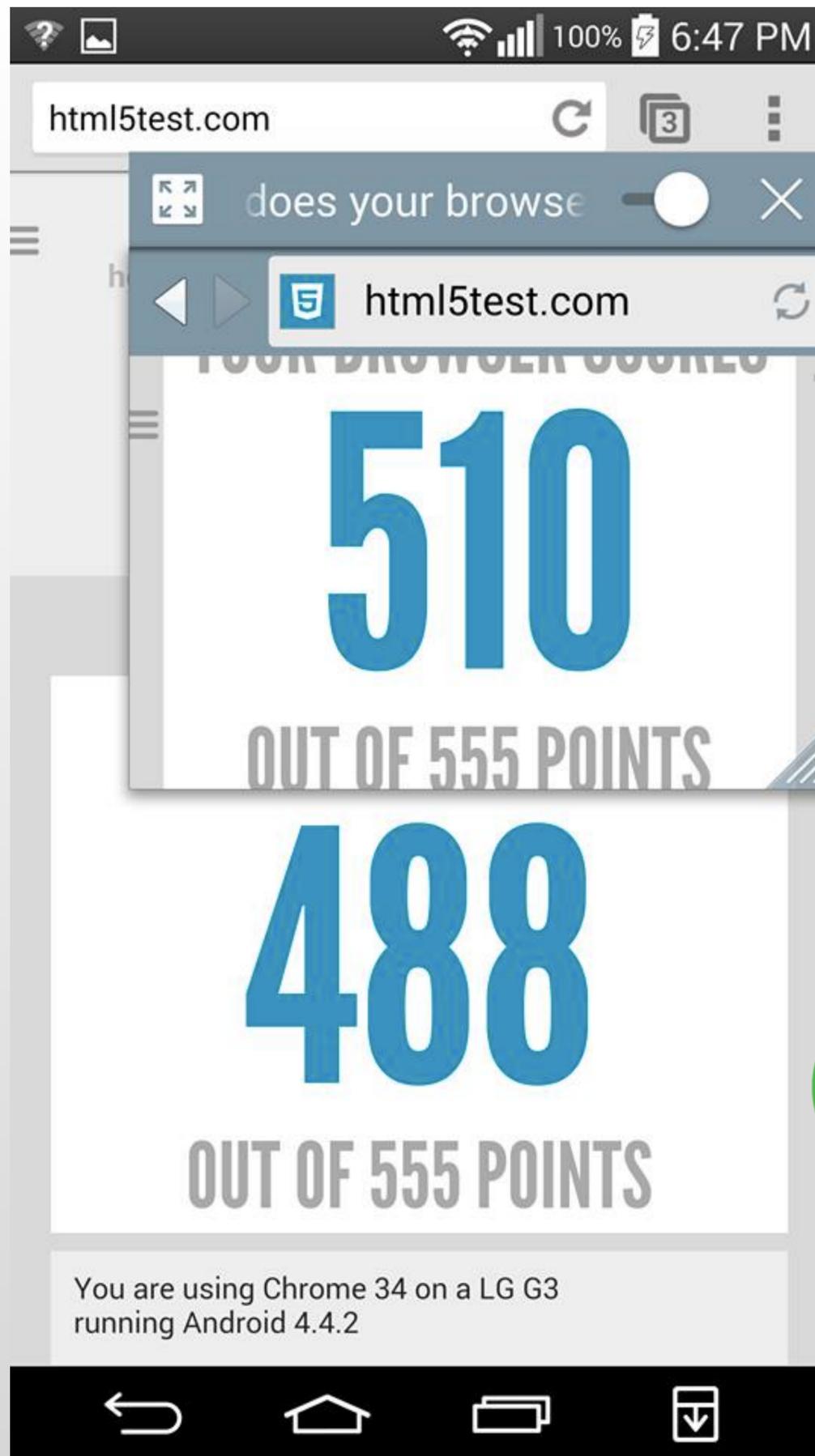
web platforms



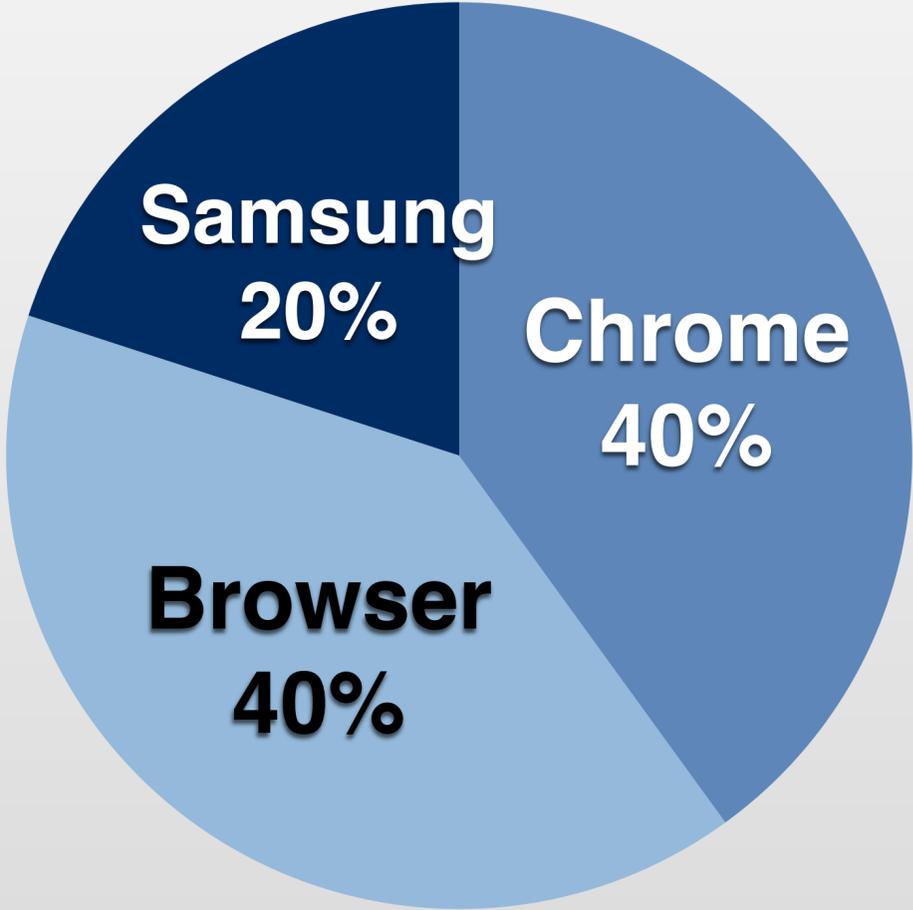
web platforms



LG G3



web platforms





O'Reilly Media

Yesterday at 8:00 AM

We hope you're ready for Round 2. Velocity Barcelona 2014 Day 2 begins at 9:30am GMT. Watch the incredible keynote lineup live at <http://velocityconf.com/live>.



Video - Velocity Europe 2014

Video

velocityconf.com

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BUILDING A FASTER, STRONGER WEB
17-19 NOVEMBER, 2014
BARCELONA, SPAIN

Velocity Video
Join us here on Monday and Tuesday, when keynotes will be streamed live. [View the full live stream schedule.](#)

Note: All tutorials, sessions and keynotes from Velocity Europe 2014 will be recorded and available in the O'Reilly Store approximately 3 weeks after the conference ends. If you would like to be notified when the Complete Velocity Video Compilation becomes available for purchase, fill out this simple form.

PLAYLIST | 1 / 21 Steven Shorrock: "Life After Human Error" - Vel... YouTube

More Velocity Video

Live Stream Schedule (All times CET - Schedule subject to change)

+ Monday, 17 November

- Tuesday, 18 November

Keynotes

- 9:30 - 9:40 Tuesday Opening Welcome John Allspaw @allspaw (Etsy), Courtney Nash @courtneynash (O'Reilly), Steve Souders @souders (Fastly)
- 9:40 - 10:00 Upgrading the Web: Polyfills, Components and the Future of Web Development at Scale Andrew Betts @triblondon (FT Labs)
- 10:00 - 10:10 Web Performance: Monitoring the Beast Mehdi Daoudi @mdaoudi (Catchpoint Systems Inc.)
- 10:10 - 10:30 Cultures of Continuous Learning Vanessa Hurst @DBNess (CodeMontage)
- 10:30 - 10:35 Troubleshooting Using HTTP Headers Steve Miller-Jones @ilnw (Limelight Networks)
- 10:35 - 10:40 Monitoring without Alerts - and Why it Makes Way More Sense than You Might Think Alois Reitbauer @aloisreitbauer (ruxit.com)

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PLAYLIST | 1 / 21 Steven Shorrock: "Life After Human Error" - Velocity Europe 2014

More Velocity Video

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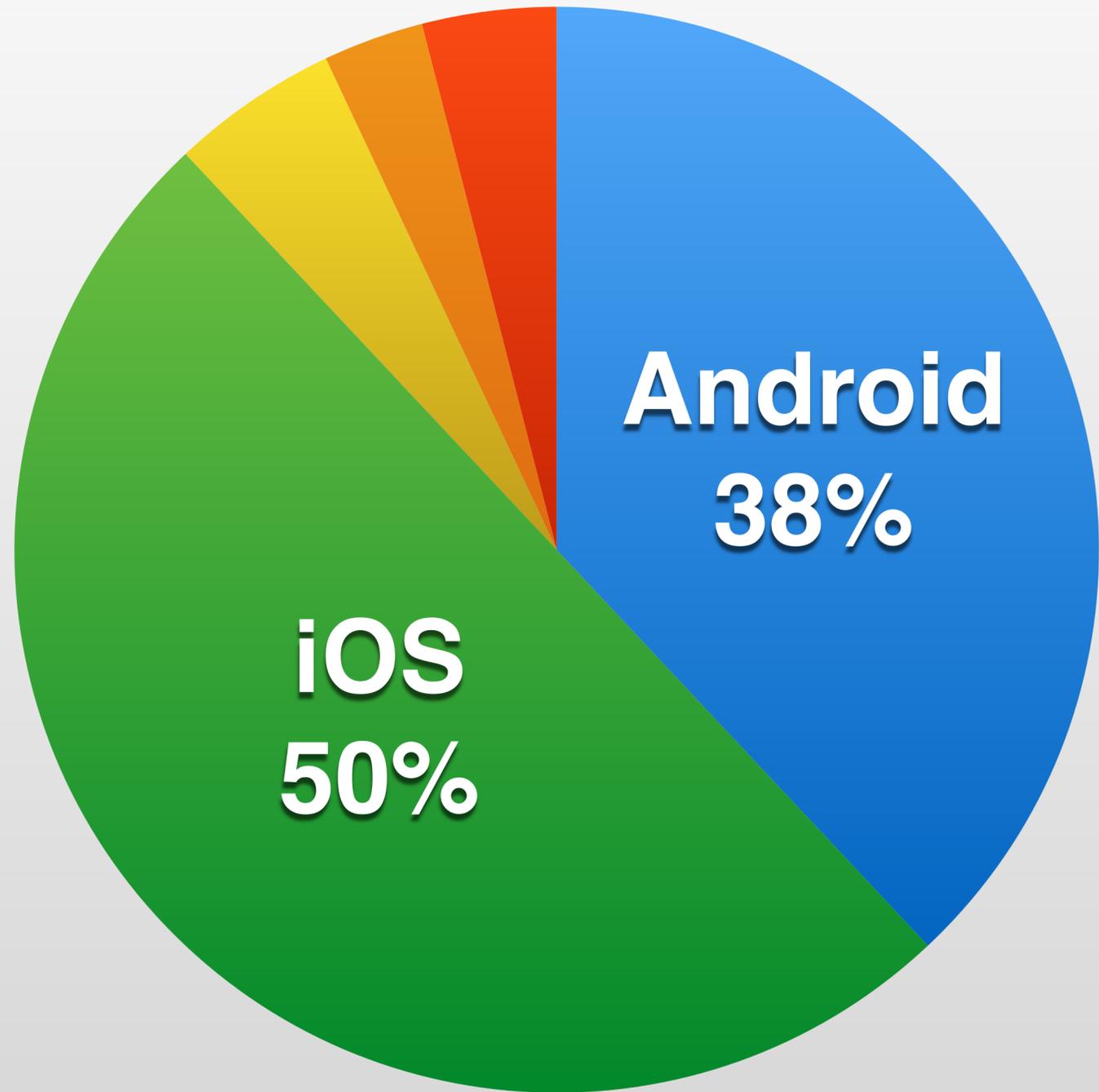
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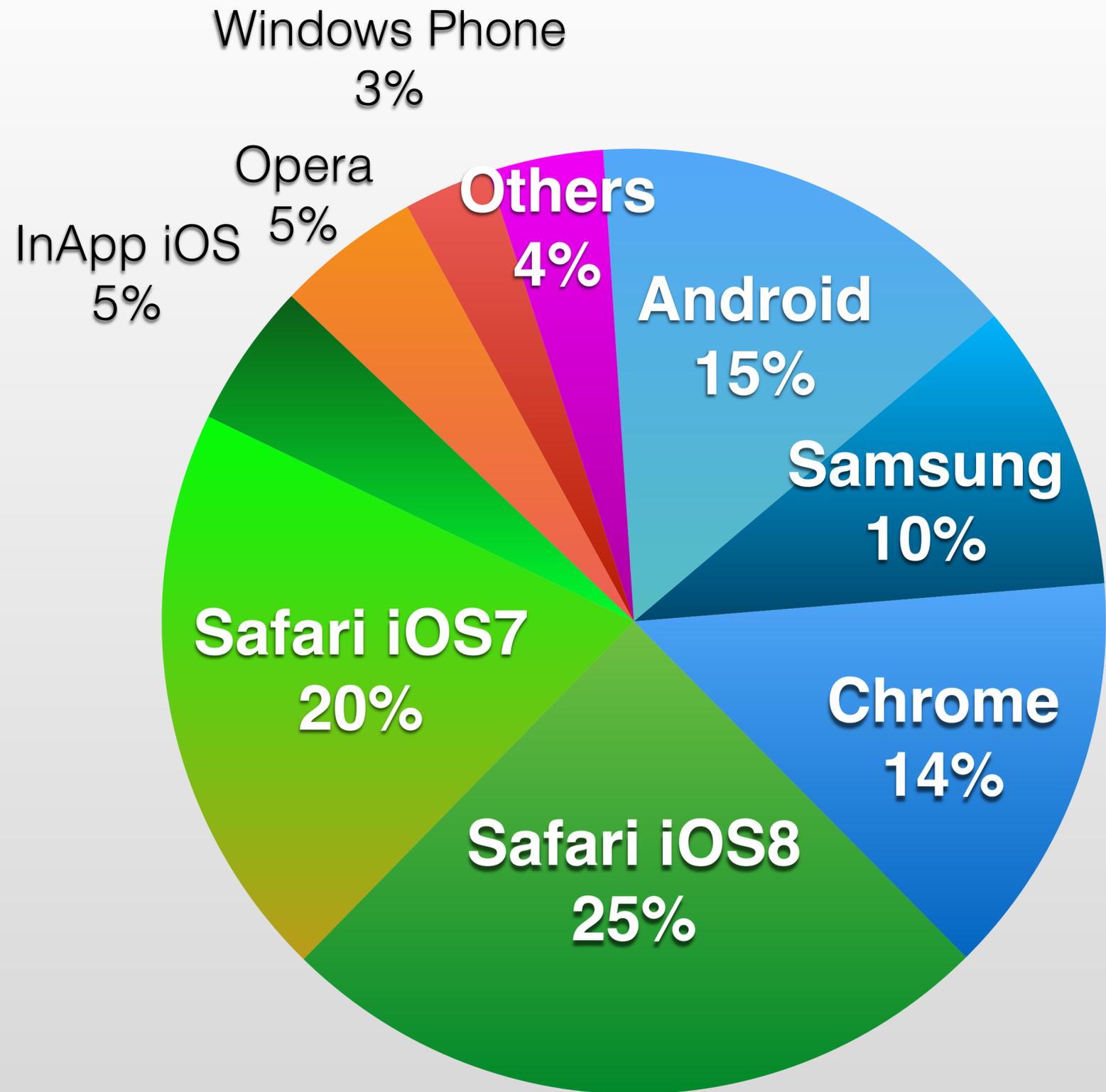
10:35 - 10:40 Monitoring without Alerts - and Why it Makes Way More Sense than You Might Think Alois Reitbauer @aloisreitbauer (ruxit.com)

Share in New Post
Send in Messenger
Copy Link
Open in Chrome Beta
Save Link

web platforms



web platforms



Others?

- Firefox
- UC Browser
- Nokia Browser
- BlackBerry Browser

1- mobile web today

- Understand the real ecosystem
- Android browsers
- Don't think you are an average user
- May change future

2- hardware access

Code time!

3- native integration

- with our own app
- with other apps
- with the OS

If you have your own app

- app banner
- communication

The Pinterest logo is displayed in its signature white script font, centered at the top of the screen. The background behind the logo is a blurred screenshot of the Pinterest mobile app's main feed, showing various pins with images and text.

Pinterest will work faster,
look better and do more
stuff if you use our app

★★★★★
600,000+ 5 star reviews!

Continue in Pinterest App

Continue in browser





https://touch.www.link

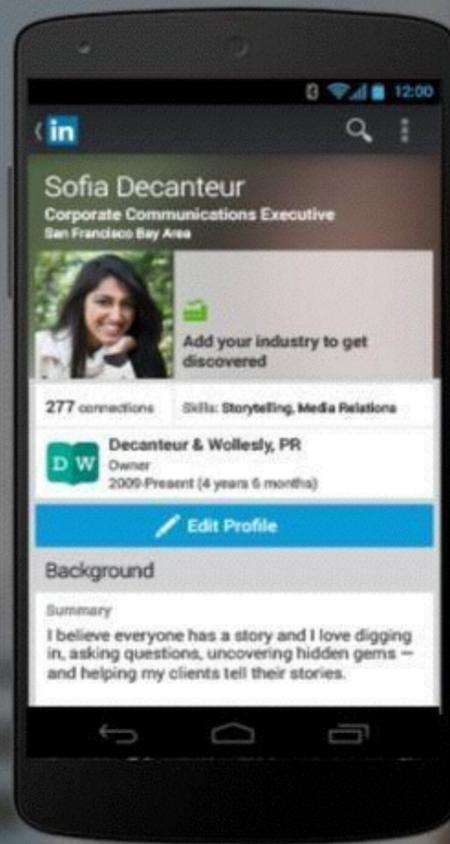


Sharing your story got simpler.

Easily edit your profile on the app.

Get the App

Continue to the mobile site ▶



I Don't Want Your Fucking App

"Any modal message—full-screen or alert—that interrupts user flow to ask them to download your app suffers from #doorslam #ux antipattern." [Thus Spake @Aral](#)

This tumblr curated by [Terence Eden](#)

[Archive](#)

[Submit](#)

[Search](#)

Search

May 13th, 2013 at 1:42PM

The screenshot shows a mobile browser interface. At the top, the status bar displays Bluetooth, signal strength, H+ network, 75% battery, and the time 13:24. The browser's address bar shows the URL www.thefreedictionary.com/_/dict.aspx. A modal dialog box is centered on the screen, featuring the logo for 'THE FREE DICTIONARY BY FARLEX' at the top. Below the logo, the text reads 'Get TheFreeDictionary.com Mobile App!'. There are two buttons: 'Install Now' and 'Close', both underlined. Below the modal, the beginning of a dictionary entry for 'fuck' is visible, including its phonetic transcription '(fʌk)', its classification as 'Vulgar Slang', and its verb forms: 'v. fucked, fuck-ing, fucks' and 'v.tr.'.

Solution, part I

DON'T DO THAT

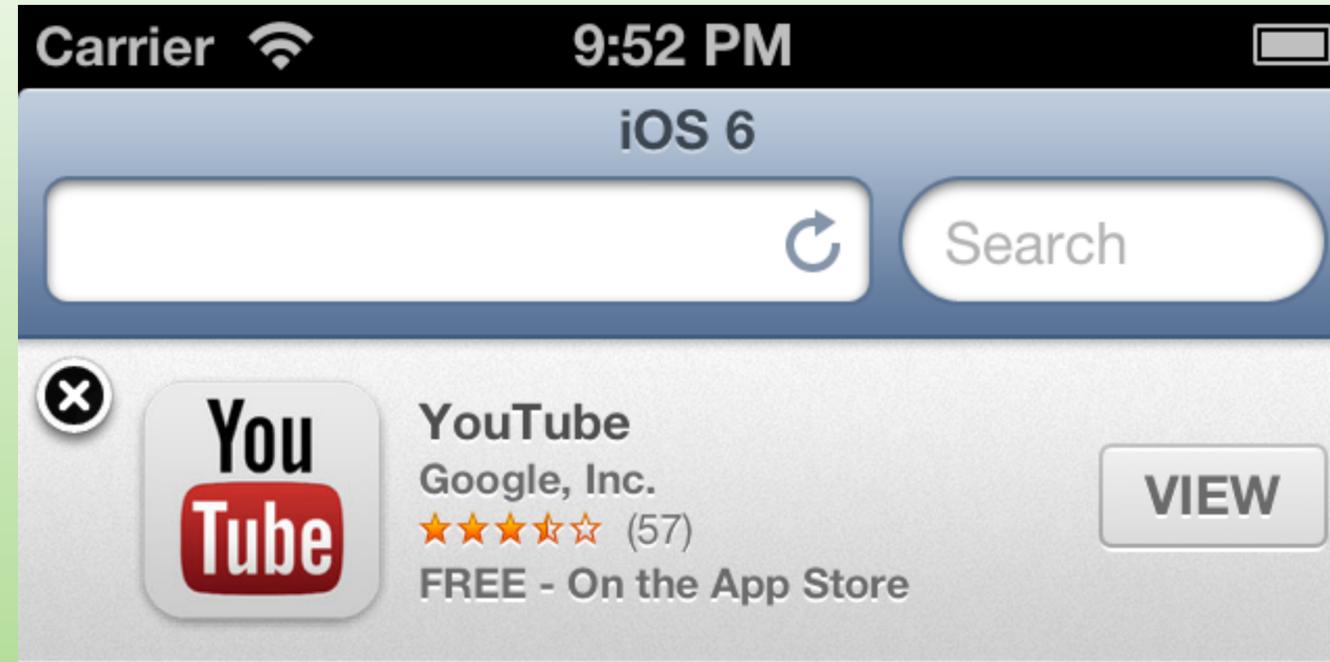
Solution, part II

native integration

```
<meta name="apple-itunes-app"  
content="app-id=999">
```

iOS

native integration



native integration

```
<meta name="apple-itunes-app"  
      content="app-id=999">
```

```
<meta name="app-argument"  
      content="">
```

*If you want to communicate
to other app*

- uri schemes
- intents

Platform access

- hacks e-commerce
- page visibility
- airplay
- web notifications

E-commerce mobile

three . Look, this is getting confusing, just select some stuff below so we can get all touchy-feely-friendly with people on your behest.

Pay hikingfan@gmail.com

Pay with Google Wallet  Google Wallet

 Visa-1234

Ruslan Abdikeev
123 Spring Street, Mountai... Shipping

Cancel Continue

arms around them without actually

Basket

1 Simple hug



Checkout

Safari since iOS 8

Verizon 12:07 PM 35% netflix.com

AMEX DISCOVER VISA MasterCard

Card Number

Zip Code

Expiration Date

< > Scan Credit Card Done

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
	0	⌫



Code time!

4- web apps

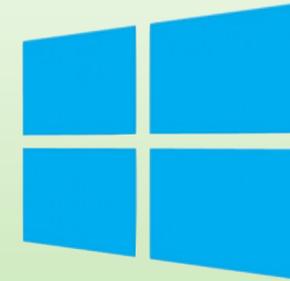
Code time!

Web apps

- iOS
- Chrome on Android
- Firefox Open Webapps
- IE Live Tile

Code time!

native integration



```
<meta name="msApplication-ID"  
      content="App">
```

```
<meta name="msApplication-PackageFamilyName"  
      content="myPackage">
```

native integration



native integration



native integration



native integration

```
<meta name="msApplication-ID"  
      content="App">
```

```
<meta name="msApplication-PackageFamilyName"  
      content="myPackage">
```

```
<meta name="msApplication-Arguments"  
      content="">
```



no api

no android

native integration

```
<meta name="msApplication-ID"  
      content="App">
```

```
<meta name="msApplication-PackageFamilyName"  
      content="myPackage">
```

```
<meta name="msApplication-Arguments"  
      content="">
```

native integration



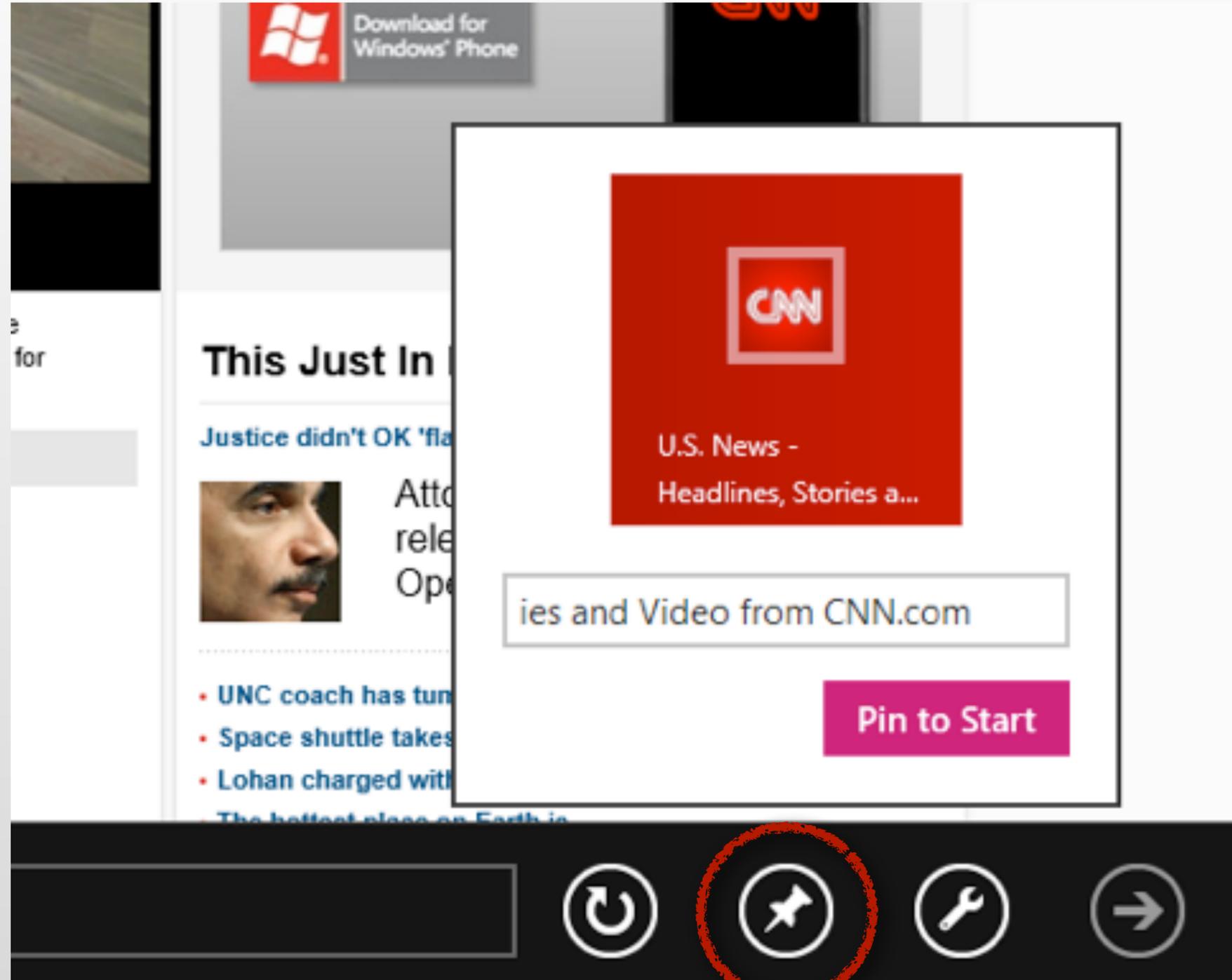
live tile

The image shows a screenshot of the CNN website as it appears on a Windows Phone. The top navigation bar is red and contains the following elements from left to right: "EDITION: INTERNATIONAL" with sub-links for "U.S.", "MÉXICO", and "ARABIC"; "TV: CNN | CNN en Español" with a "Set edition preference" link; the "CNN" logo with a globe icon; a search bar with a "SEARCH" button; and "Sign up" and "Log in" links. Below the navigation bar is a secondary menu with links for "Home", "Video", "World", "U.S.", "Africa", "Asia", "Europe", "Latin America", "Middle East", "Business", "World Sport", "Entertainment", "Tech", "Travel", and "iReport".

The main content area features a large banner for "Amanpour" with a photo of news anchor Katie Couric. Below this is an "Editor's choice" section with three thumbnails: "Stars & their fast cars", "New front in war on cancer", and "Endeavour heads to L.A.". The central article is titled "Tiny homes hit the big city" and includes a photo of a woman in a tiny home. To the right is an advertisement for "The power of CNN on your Windows Phone" with a "Download for Windows Phone" button. Below the ad is a "This Just In" section with a "U.S. News - Headlines, Stories a..." live tile. A "Pin to Start" button is located at the bottom right of the live tile area.

At the bottom of the screen is the Windows Phone taskbar, which includes a back arrow, the CNN logo, the address bar showing "http://edition.cnn.com/US/", and navigation icons for refresh, search, settings, and forward.

live tile



live tile

```
<meta name="msapplication-TileImage"  
      content="tile.png">
```

```
<meta name="msapplication-TileColor"  
      content="#ef0303">
```

enhance your app

*You've said **live** tile!!!*

live tile

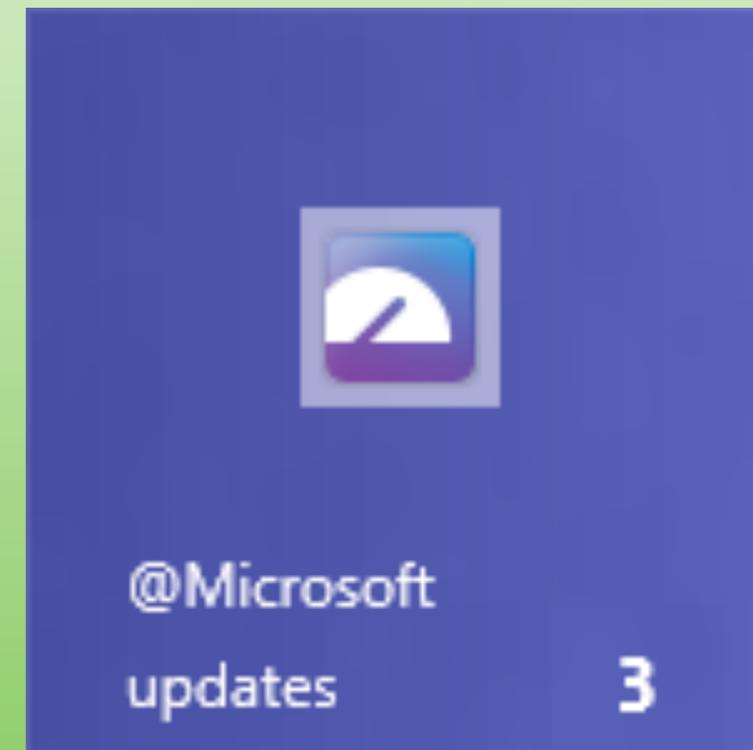
```
<meta name="msapplication-badge"  
      content="frequency=60;polling-uri=XXX">
```

live tile

```
<meta name="msapplication-badge"  
      content="frequency=60;polling-uri=XXX">
```

```
<?xml version="1.0" ?>
```

```
<badge value="3" />
```



live tile

```
<meta name="msapplication-badge"  
      content="frequency=60;polling-uri=XXX">
```

```
<?xml version="1.0" ?>  
<badge value="newMessage" />
```



enhance your app

It's even better on

IE11



live tile

```
<meta name="msapplication-notification"  
      content="frequency=30;polling-uri=">
```



live tile

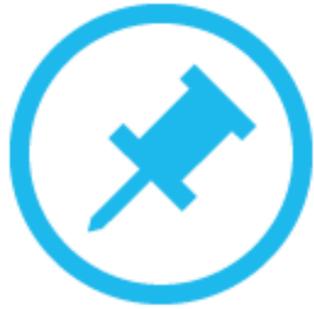
```
document.addEventListener('mssitepinned',  
    startPeriodicUpdateBatch, false);
```



live tile

```
document.addEventListener('mssitepinned',  
    startPeriodicUpdateBatch, false);
```

buildmypinnedsite.com



Got a minute? Build a site tile.

Your site sits next to apps on the Windows 8.1 Start Screen. Now with notifications. [Start now](#) →

① Build your own site tile

? Live Preview

② Add Notifications

?

With Windows 8.1, pinned site tiles can notify a user outside Internet Explorer 11 and pull them right back in! If you have a web feed, you can automatically build notifications into your tile. Who said RSS was dead? If you don't have one, skip this step. You can choose to implement custom tile notifications later.

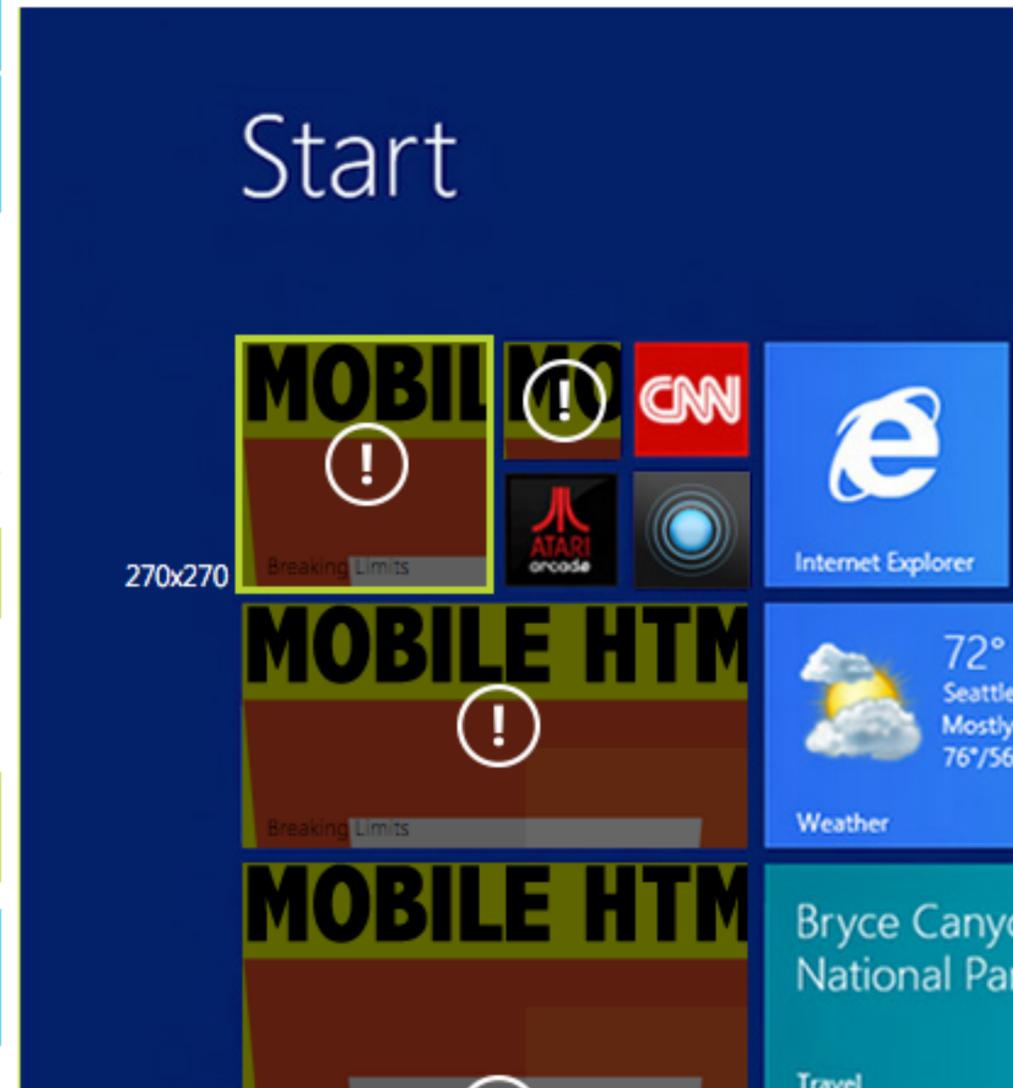
Put the URL to your
RSS feed here
Live updates will be created
automatically from your RSS
feed

Get feed →

Next Step →

③ Get the Code!

?



5- future

Service Workers

Push Messages

Navigation Transitions

New interaction types

Wearable integration

Integration with voice assistants

The Physical Web

UriBeacon

firtman@gmail.com
@firt

5pm ModevLounge
Book signing

firt.mobi/mh5

firt.mobi/pmw

