

An abstract graphic of a circuit board pattern in light blue, featuring vertical lines and circles connected by horizontal and diagonal lines, set against a blue gradient background.

MOBILE APPS WHERE IS TECHNOLOGY HEADING?

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Q

HOW MANY PAID APPS DO YOU HAVE IN YOUR MOBILE
PHONE?

THE NUMBER OF SMARTPHONE USERS WORLDWIDE?

- In 2015 over **1.91 billion** smartphone users
- It will increase another 12.6% to near **2.16 billion** in 2016

HOW MANY APPS ARE AVAILABLE ON APP STORES AND GOOGLE PLAY?



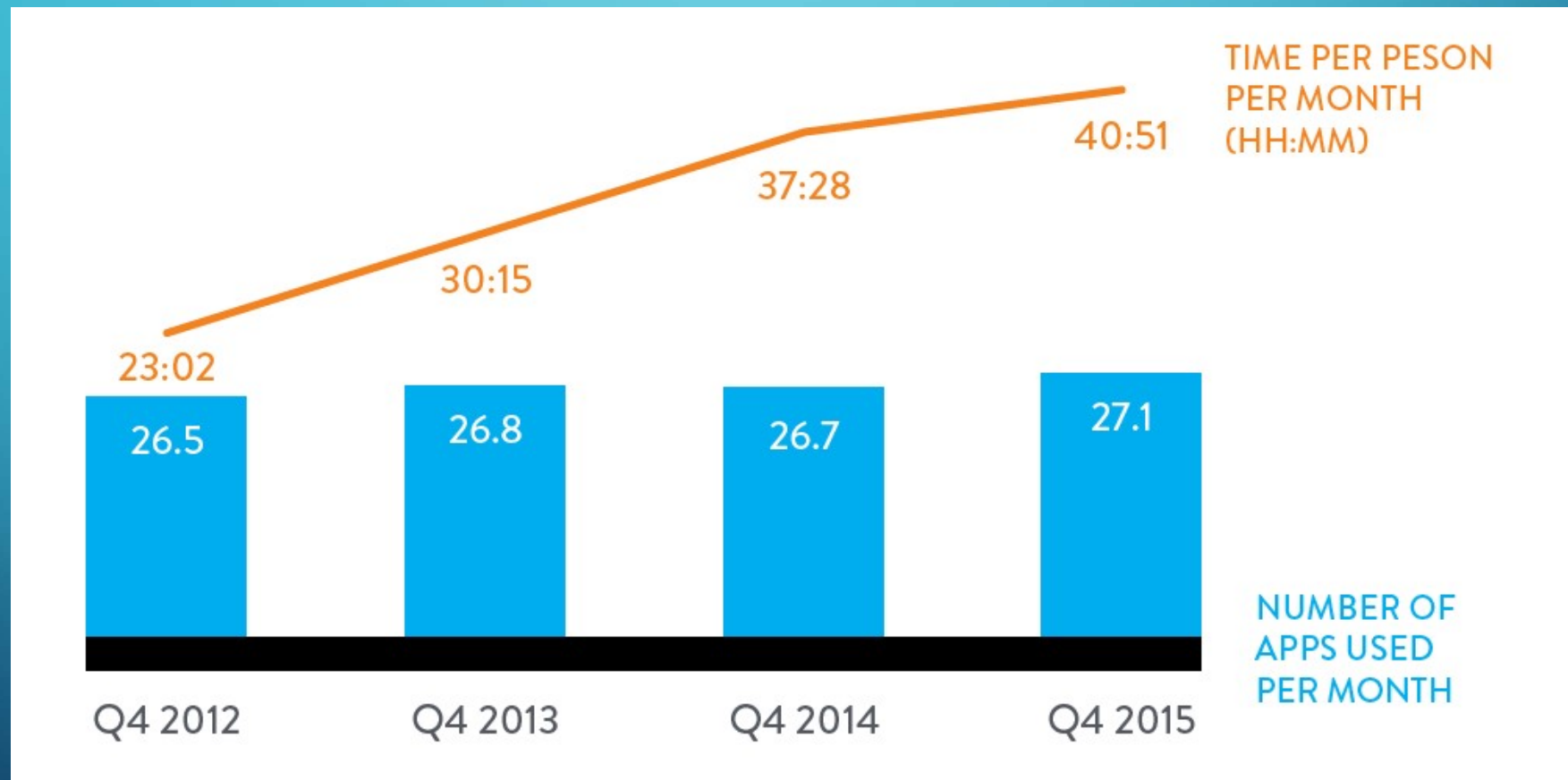
Apple's **1.5 million** available apps



Android **1.6 million apps.**

(July 2015)

HOW MANY APPS DO YOU HAVE IN YOUR PHONE?



Top 10 Apps in 2015

RANK	APP	AVG UNIQUE USERS
1	FACEBOOK	126,702,000
2	YOUTUBE	97,627,000
3	FACEBOOK MESSENGER	96,444,000
4	GOOGLE SEARCH	95,041,000
5	GOOGLE PLAY	89,708,000
6	GOOGLE MAPS	87,782,000
7	GMAIL - EMAIL FROM GOOGLE	75,105,000
8	INSTAGRAM	55,413,000
9	APPLE MUSIC	54,550,000
10	MAPS (APPLE)	46,406,000

The background of the slide features a teal-to-blue gradient with white circuit-like line art patterns in the corners. A white rectangular box with a blue border is centered on the slide.

80%

**OF TIME SPENT IS IN
USERS' TOP 3 APPS**

Source: comScore Mobile Metrix, U.S., Age 18+, June 2015

The background is a blue gradient with abstract white circuit-like lines and nodes in the corners. The title is centered in white, uppercase letters.

APPS INVESTMENT AND REVENUE

And it's expensive, especially compared to the web

IT spends more than **2x** of its tech budget on apps than websites

Building Apps	10%	Vs.	Building and Maintaining Websites	8%
Maintaining Apps	9%			

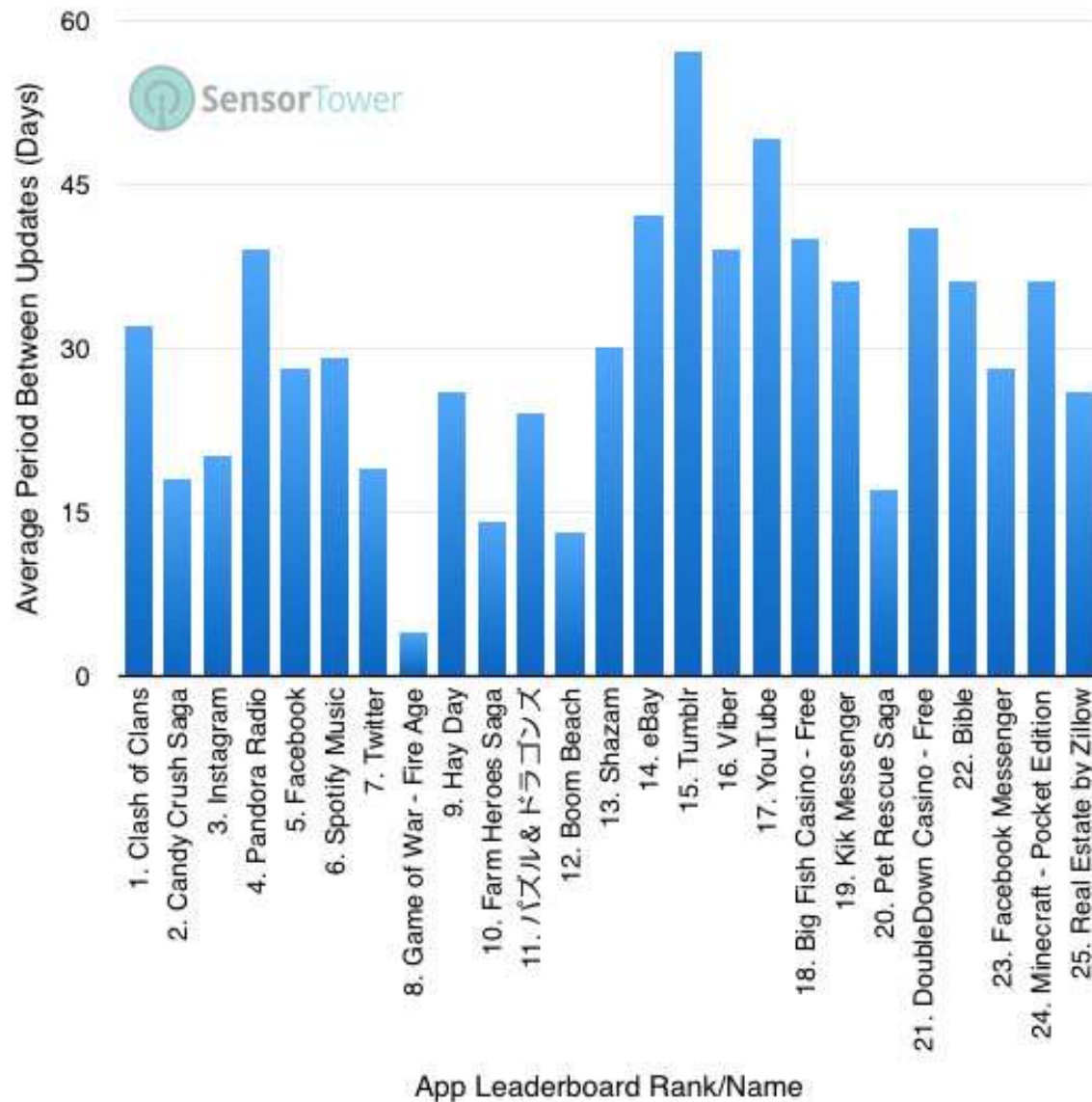
And spends more than **\$13.5B** annually on contractors to keep up with building and maintaining apps.

COST OF DEVELOPMENT

- Cost of development – \$50,000-\$120,000
- Maintenance cost – \$2000-\$7000/yr
- Cost of updates – \$5000-10,000 each update

medium-sized app using the lean approach,
which delivers a Minimum Viable Product (MVP)

Average Number Of Days Between Version Updates For Top 25 iOS Apps

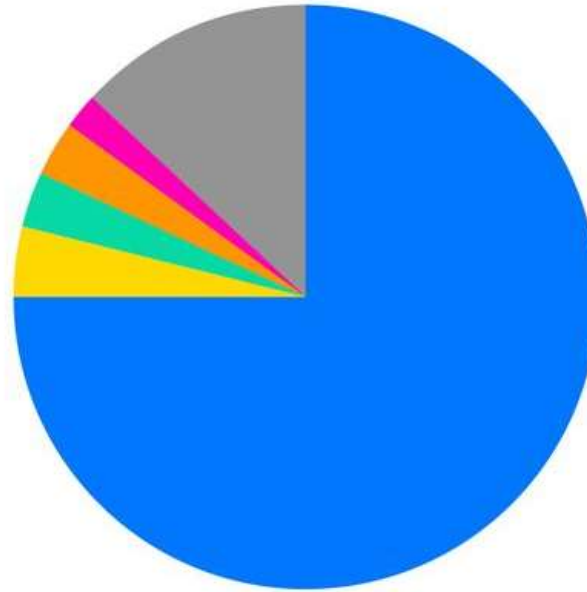


What we do part of the update

- Bug fixes
- Device compatibility

Application revenue

April 2016



Games Social Networking Entertainment Music Education Other

Credit: App Annie

The Verge's Casey Newton wrote “the middle class for apps is shrinking. There are the whales, the game makers; there are the well-known social networking, cloud service, and entertainment apps; and then there’s everybody else, left to figure out whether a one-time download fee, in-app purchases, or a subscription model could possibly work for them. (It often doesn’t.) ”

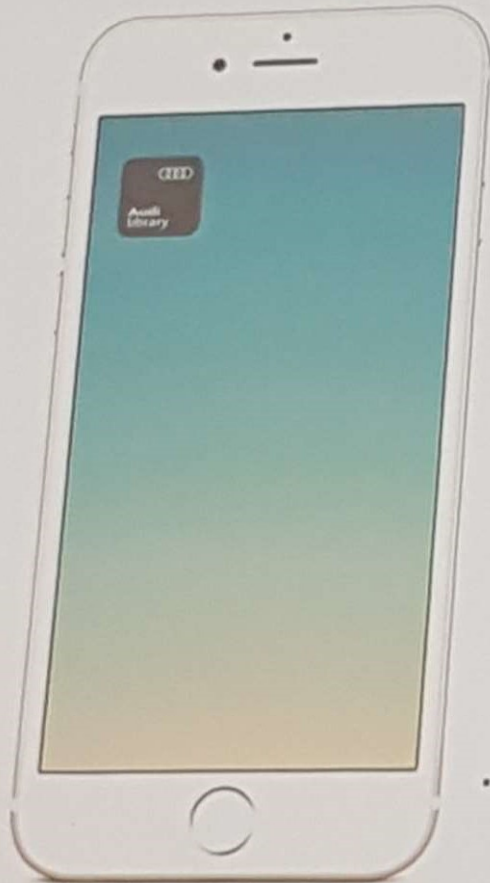
WHAT'S NEW

- Apple and Google both introduce subscription model which will allow developer charge for yearly subscription and major upgrade.
- Apple introduce new development platform Swift



WHY OUR FAVOURITE BROWSERS DOESN'T ACT LIKE APPS
WRAPPER AND WEB PAGES AS MOBILE APPS

What makes apps different?



- Offline & Experience
- Device "Real Estate"
- Device Storage
- Notifications
- Deep links
- iBeacons
- Sensors
 - Camera
 - Geolocation
 - Touch ID
 - Gyro
 - Compass
- All other APIs and Sensors that Apple, Google & Microsoft are building into their devices and OSs

The background is a blue gradient with abstract white circuit-like lines and circles in the corners.

THERE ISN'T THAT MUCH DIFFERENCE BETWEEN
A MOBILE APPS AND WEB SITE WHEN
BROWSERS ALLOW ACCESS TO THE NATIVE
FUNCTIONALITY



WHAT NEXT?

INTRODUCING PWA

Progressive Web Applications take advantage of new technologies to bring the best of mobile sites and native applications to users. They're reliable, fast, and engaging.



Instant Loading

Service workers allow your apps to load nearly instantly and reliably, no matter what kind of network connection your user is on.



Add to Home Screen

Web app install banners give you the ability to let your users quickly and seamlessly add your web app to their home screen, making it easy to launch and return to your app.



Push Notifications

Web push notifications makes it easy to re-engage with users by showing relevant, timely, and contextual notifications, even when the browser is closed.



Fast

Smooth animations, scrolling, and navigations keep the experience silky smooth.



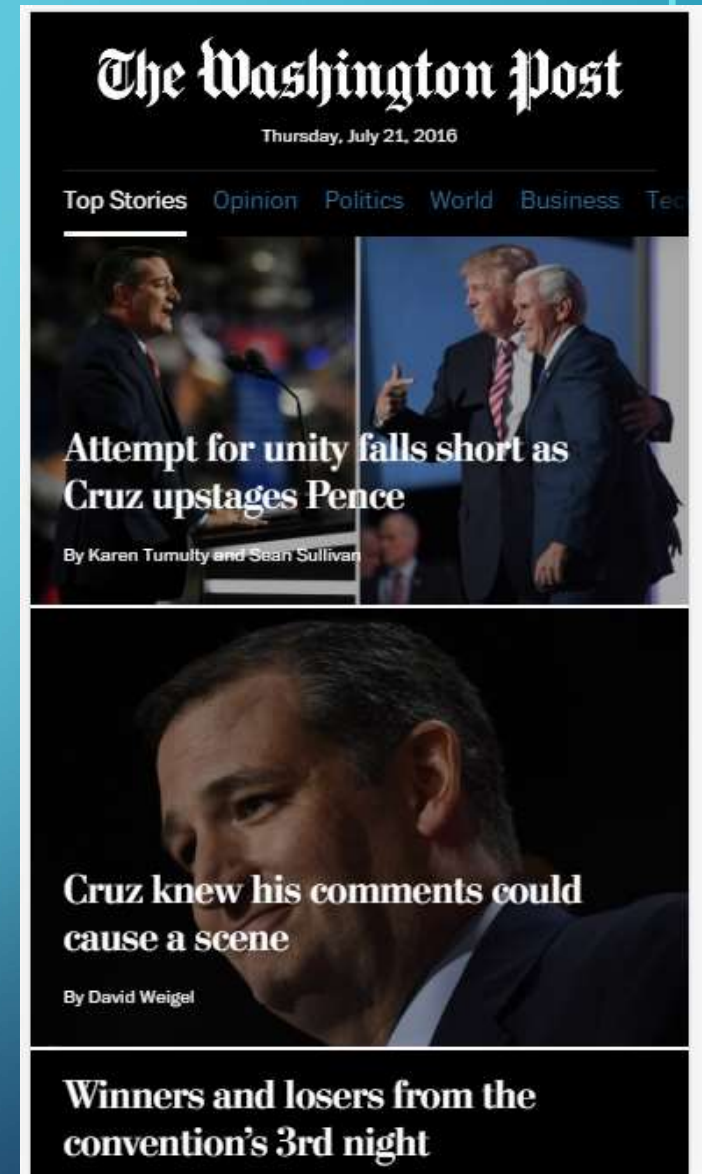
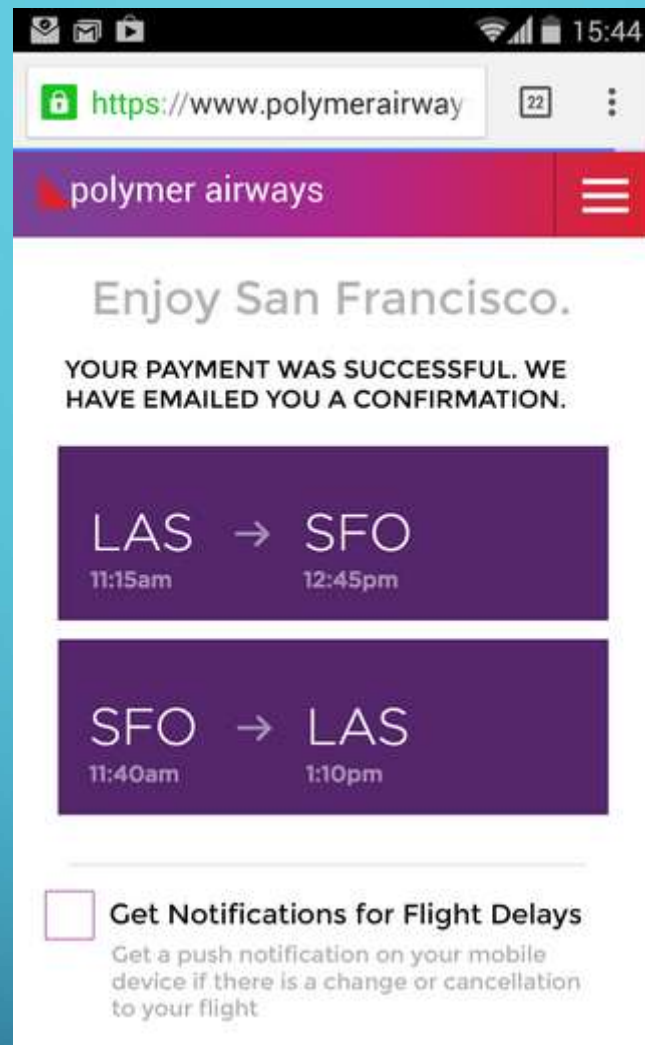
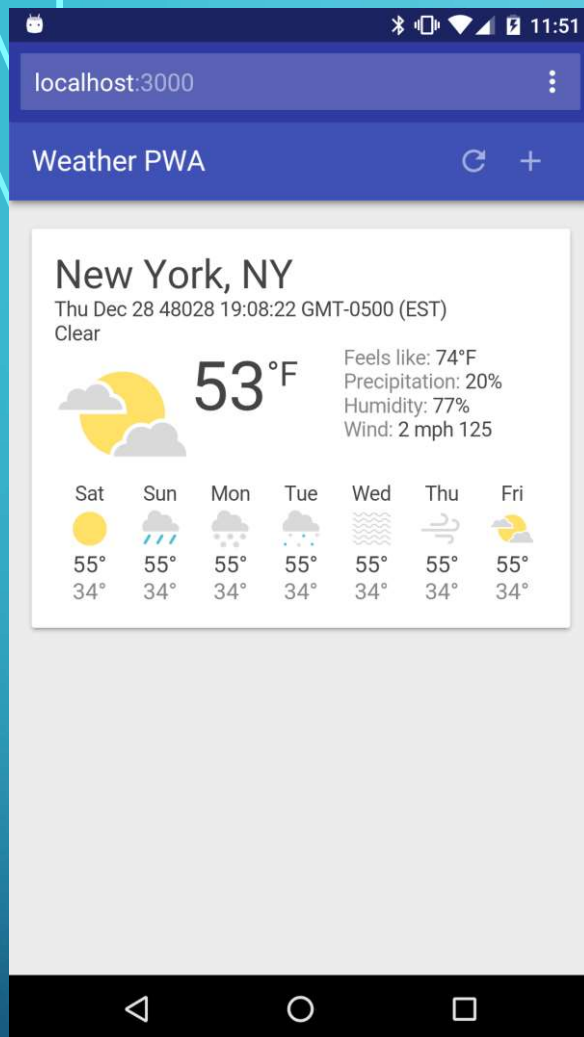
Secure

HTTPS secures the connection between you and your users, ensuring your users information is protected and isn't tampered with.



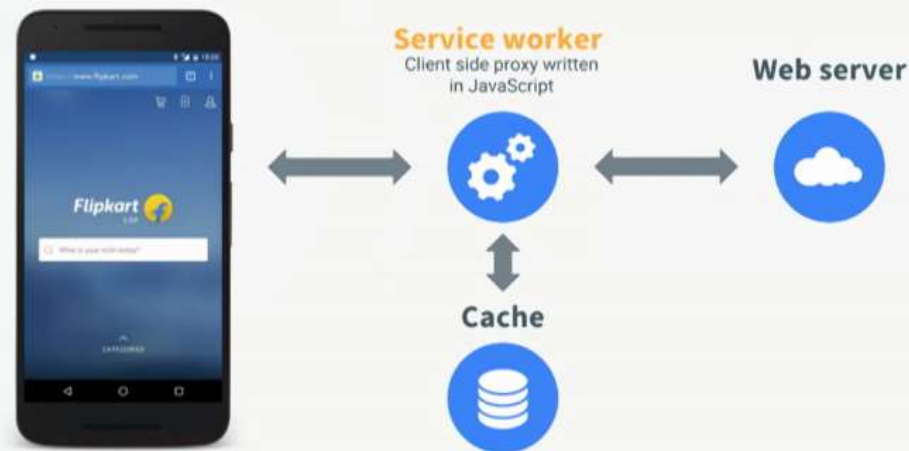
Responsive

Modern users live on phones, tablets and laptops; your apps and websites should do the same. Learn how to structure and code your content to look great on screens of any size.



<https://www.washingtonpost.com/pwa/>

Service workers enable *reliable* performance



AliExpress

2x more

page views

74% increase

in time spent

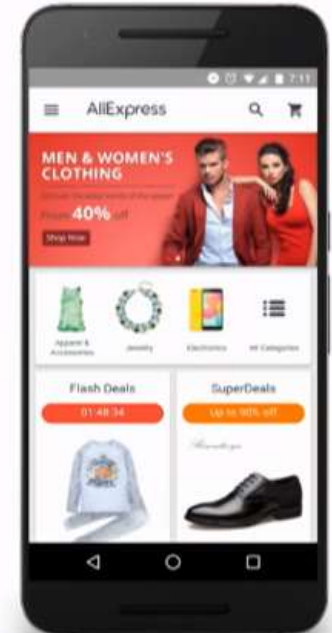
82% more

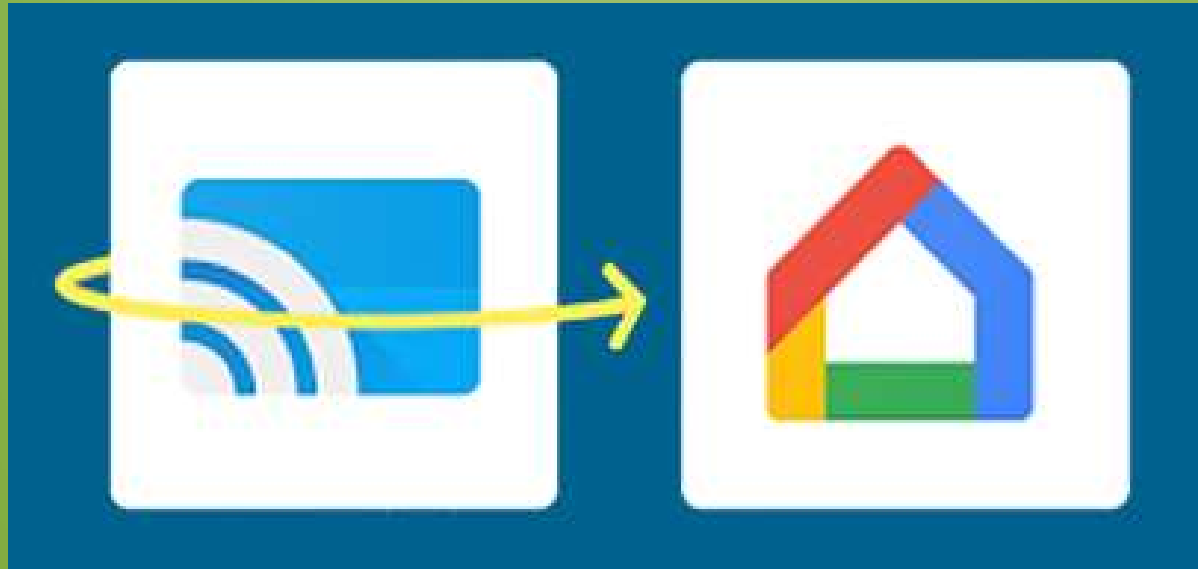
conversions on iOS



"One of the reasons we built a **Progressive Web App** was to be able to **invest in the web experience across all browsers**. Not only did we see **huge benefits** on browsers that support the latest features, but we also got to see a bump **across the board**. That is the sign of a great investment, and one that will keep paying for itself as browsers evolve."

Lijun Chen, Director of AliExpress Mobile Team.





Chromecast platform now only support PWA development only

Android Instant Apps

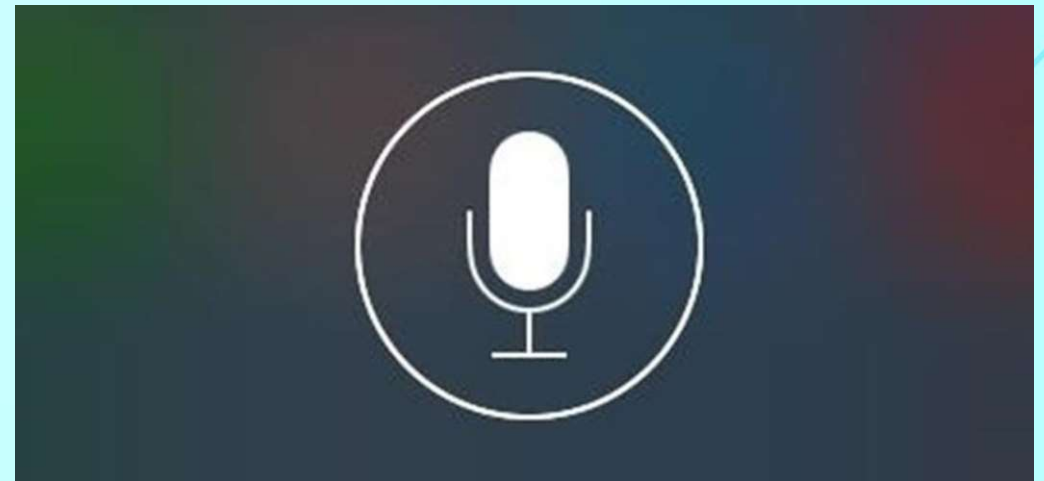
Native Android apps, without the installation

An evolution in app sharing and discovery, Android Instant Apps enables Android apps to run instantly, without requiring installation. Instant Apps lets you experience what you love about apps—fast and beautiful user interfaces, high performance, and great capabilities—with just a tap.

Request early access to the Instant Apps documentation today.

I'M INTERESTED IN ANDROID INSTANT APPS

<https://developer.android.com/topic/instant-apps/index.html>



Next digital revelation through mobile

The background is a blue gradient with a faint, abstract circuit board pattern. The pattern consists of white lines and circles, resembling a network or data flow, located in the corners and along the edges.

MOBILE APPLICATION EVOLUTION

What's Wechat?

WeChat is a smartphone application that consists of...



We don't need more apps we want apps to do more

WHAT WE NEED?

- Simple way to access native functionality
- Users just have to download once
- Less resource for simple apps
- Less time to development and go to market
- Offer super native experience without big expenses
- This does not remove the need for native experience but helps small and medium business for experiences

KEY POINT

- 80% of enterprise applications fail to engage users
- Can your app be one of the top 30 apps that people use every day
- Is it sustainable to create apps where return of investment is little to nothing
- Apple and Google both have to come to there senses
 - Browsers need to gear up to use mobile differently
 - Allow easy access to the hardware
 - Better UI framework (HTML 5/CSS3 not powerful enough)
 - Access to the processing
 - Move some of the elements to cloud/web