




Re-thinking the Mobile Journey

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Why we're here

A photograph of three young people (two women and one man) looking at a smartphone together. The image is dimly lit and has a dark overlay. The text is centered over the image.

With the shift to mobile, the way we
consume content has changed

What is happening?

- Mobile is our main focus
- Mobile web suffers from slow, cluttered sites
- User experience is not good
- Mobile Apps create silos and reduce diversity
- **Many ways to access mobile content**

Targeted queries



Search

Serendipitous discovery

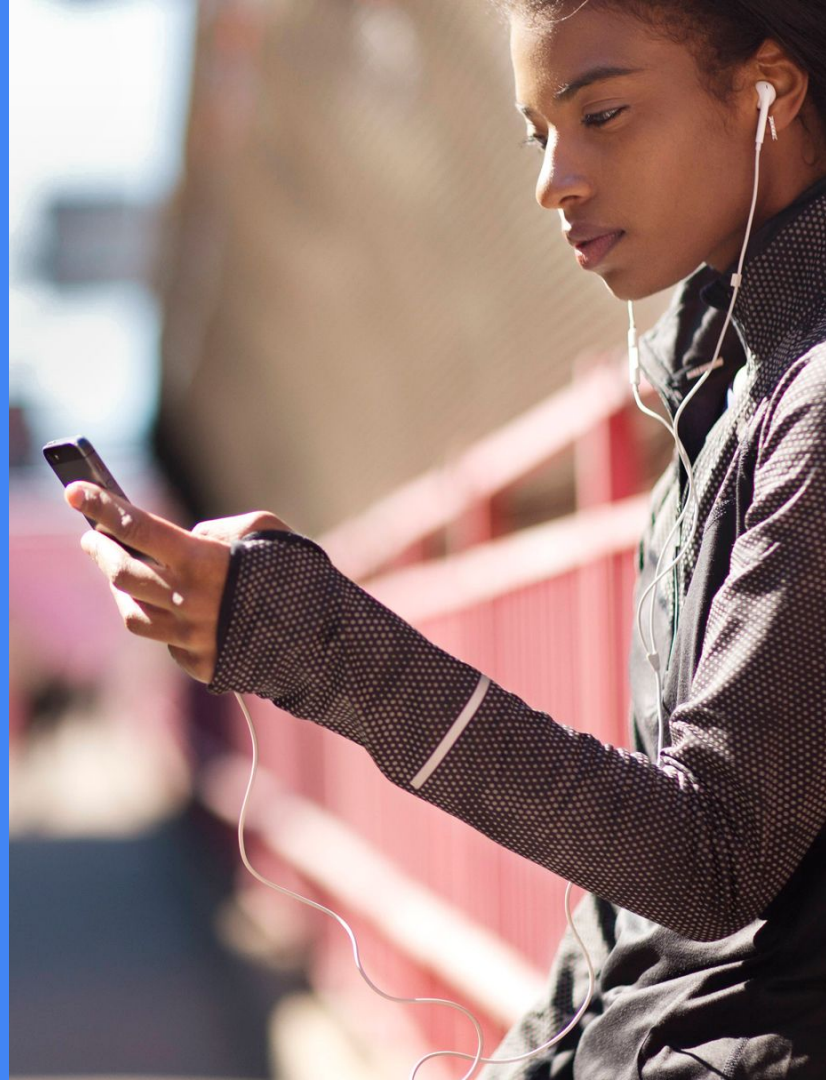


Social, aggregators

Habitual use



Publisher apps



Performance

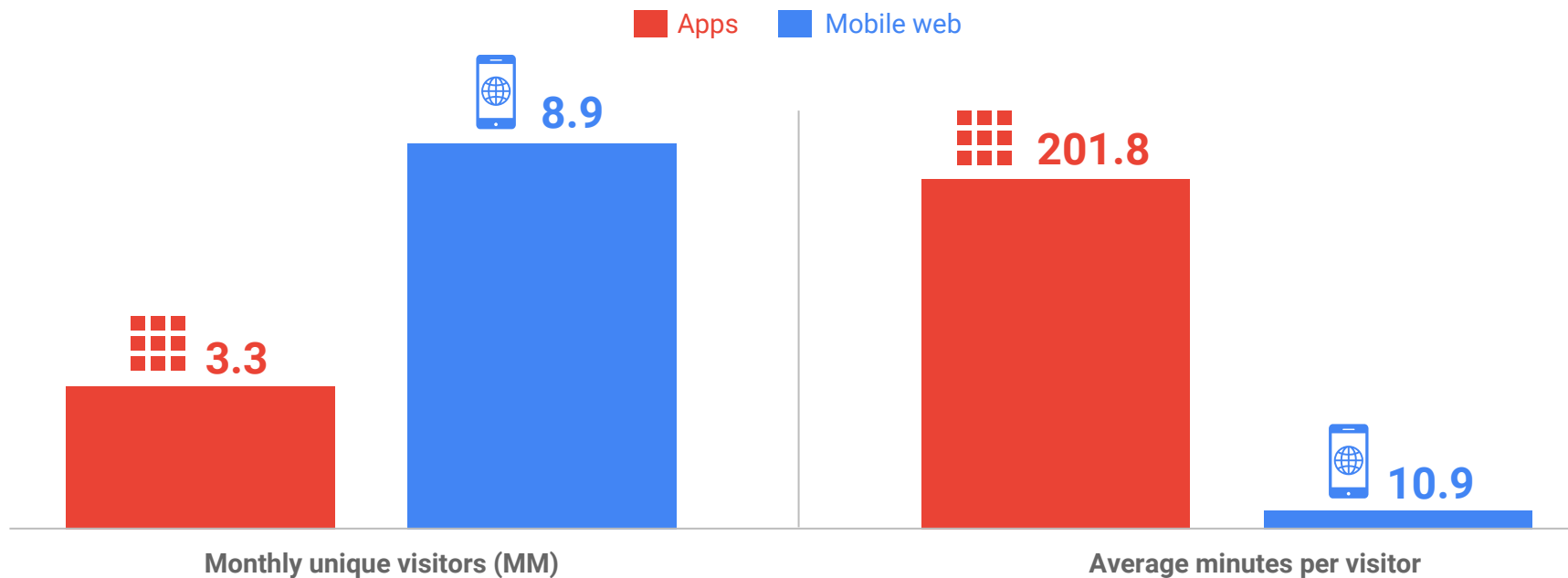


53%

of people abandon a website that takes more than 3 seconds to load

The web offers great discovery, but engagement is low

Top 1,000 mobile apps vs. top 1,000 mobile web properties



Publishers are faced with new challenges

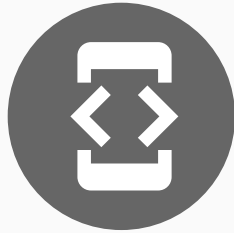
With a common objective: an open ecosystem of knowledge

- 1 Evolving ecosystems of closed distribution models
- 2 Poor consumer perceptions of mobile web experiences
- 3 Monetization at the content level is hard
- 4 Technology updates are outpacing development cycles
- 5 Ad Blockers are a challenge to the industry

So we need something...



Fast



Easy to
implement



Mobile
Friendly



Embrace the
open web



Gives strong
Incentives

Accelerated Mobile Pages (AMP)

Simplify your web page



```
;(function(e){e.fn.collagePlus=function(t){function n(t,n,i,s){var c=i.padding*(t.length-1)+t.length*t[0][3],u=i.albumWidth-o,a=u/(n-o),f=0,l=n<i.albumWidth?true:false;for(var c=0;c<t.length;c++){var h=e(t[c][0]),p=Math.floor(t[c][1]*a),d=Math.floor(t
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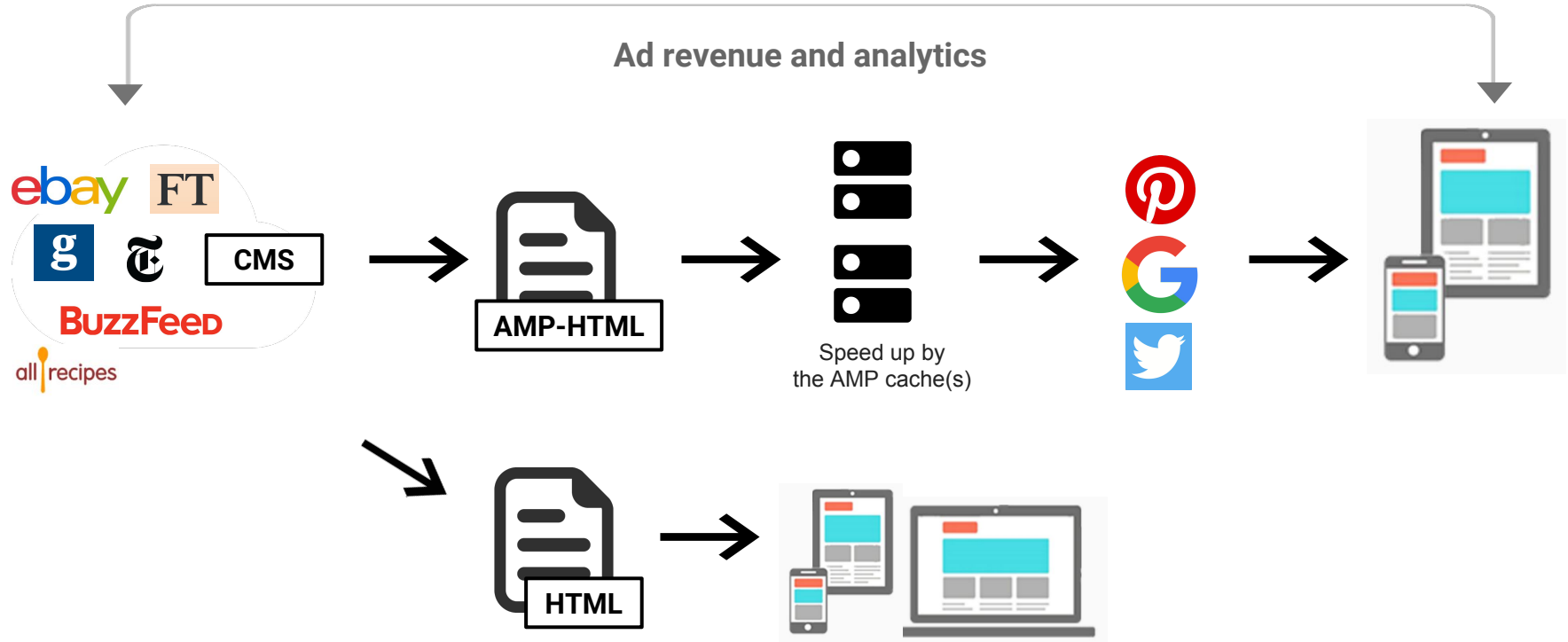
Web pages, today



```
<script src="https://cdn.ampproject.org/v0.js" async>  
</script>
```

Accelerated Mobile Pages

How does this all work together?



700k

domains publishing AMPs

<1 second

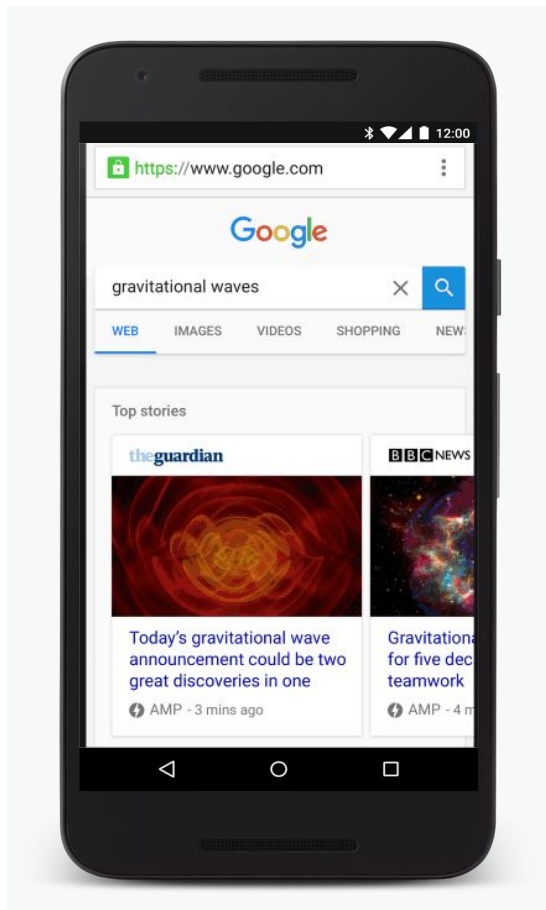
median load time

4x

faster

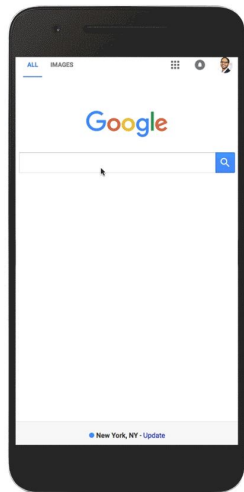
10x

less data

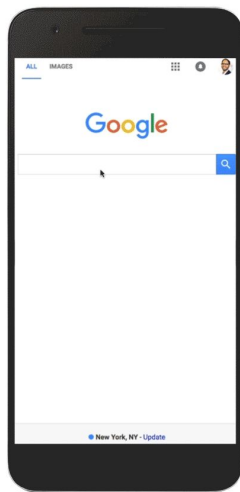


Faster ads and landing pages

Fast Ads with A4A

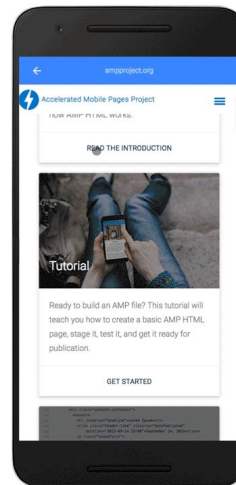


00:00



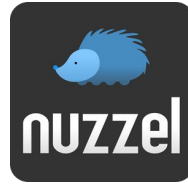
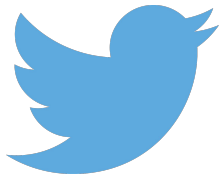
00:00

Fast Ad Landing Pages with AMP ALP



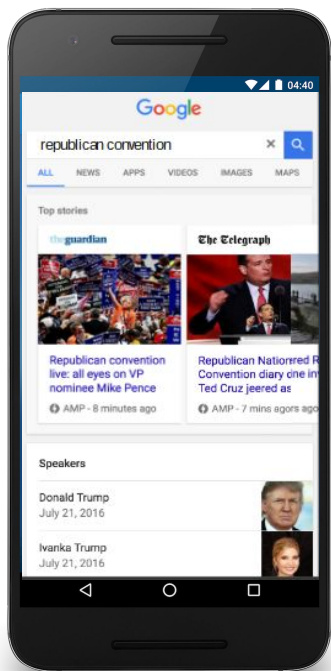
Load Time
00:83

AMP's ecosystem also helps distribute your AMPs

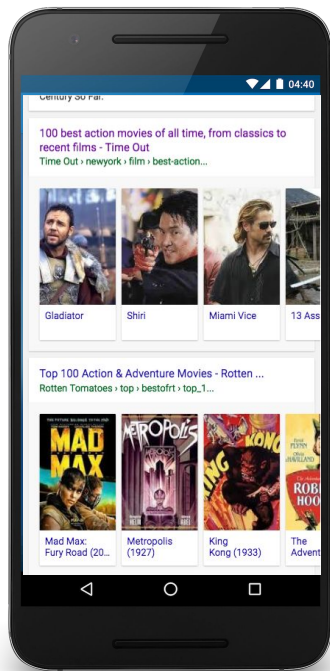


Dive-In: Google canvasses that support AMP

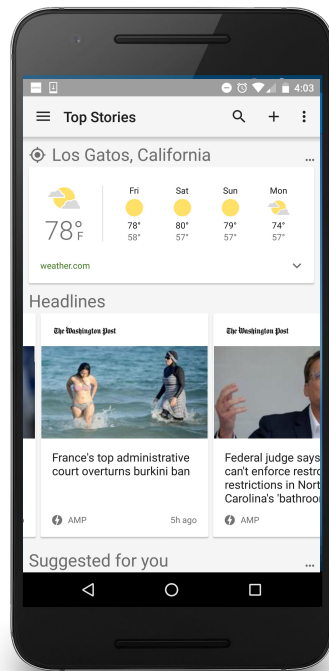
Top story carousel in Search



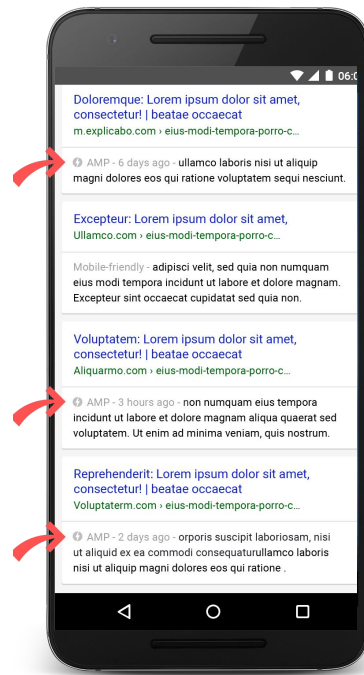
Select rich cards in Search



News and Weather App



Soon: Blue links in Search



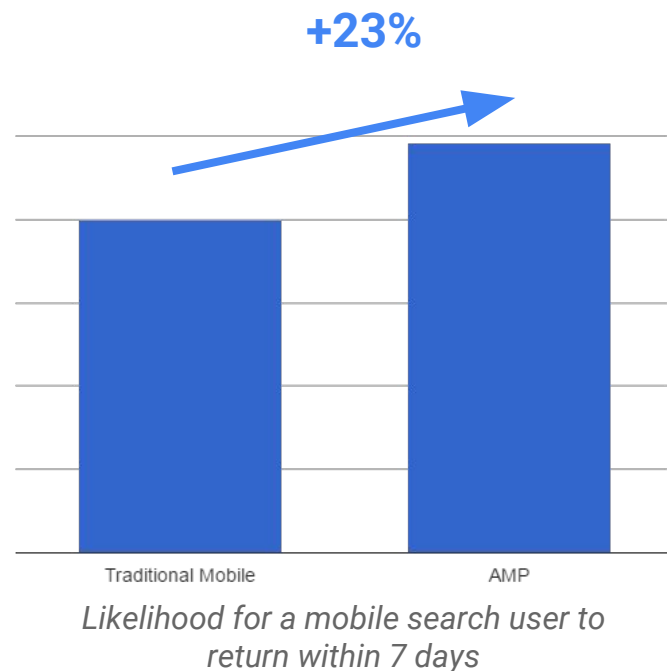
Case Study: AMP helps WaPo increase retention

Better User Experience with AMP

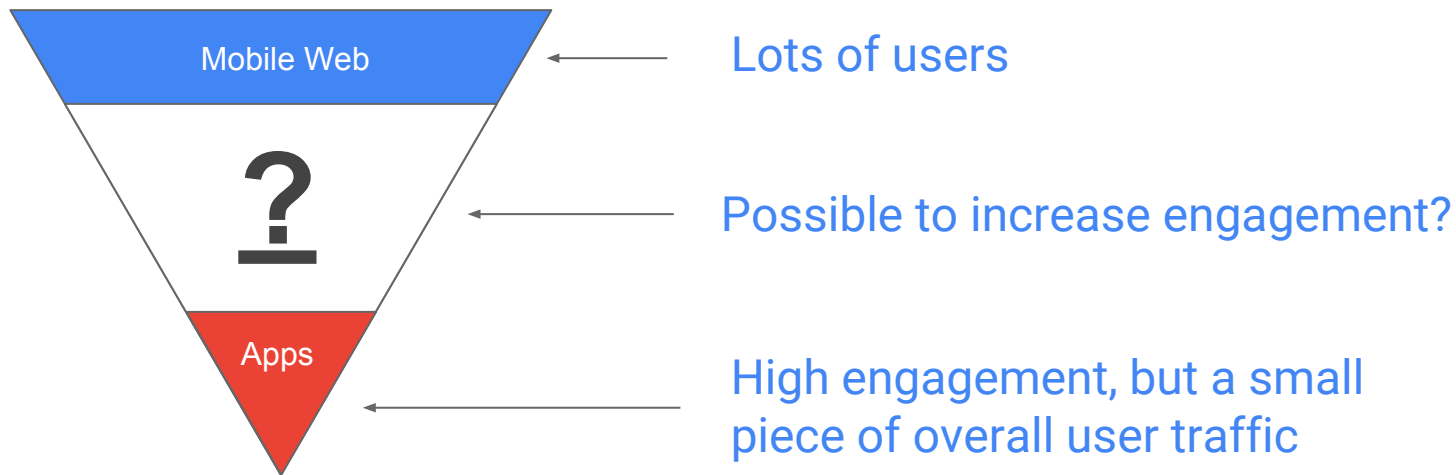
- Over **1,000 AMP articles** every day
- Load times average 400 milliseconds, an **88% improvement** over traditional mobile

Higher Reader Loyalty and Retention

- For users who read stories published with AMP, more are returning within 7 days, an increase of 23% over their traditional msite



*The AMP ecosystem can deliver a lot of value.
What else can we do to improve our site?*



Progressive Web Apps (PWA)

Demo

What is a Progressive Web App?



Books eBooks Tickets Shop Jobs

CODING
CSS
HTML
JavaScript
Techniques

DESIGN
Web Design
Responsive
Typography
Inspiration

MOBILE
iPhone & iPad
Android

A Beginner's Guide To Progressive Web Apps

By [Kevin Farrugia](#)

🕒 August 11th, 2016 📌 [Apps, Service Workers, Web apps](#)

🗨️ 21 Comments

Progressive web apps could be the next big thing for the mobile web. Originally proposed by Google in 2015, they have already attracted a lot of attention because of the relative ease of development and the almost instant wins for the application's user experience.

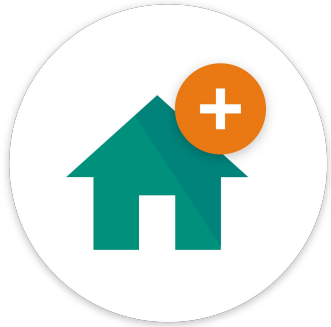
Advertisement



“... takes advantage of the latest technologies to combine the best of web and mobile apps. Think of it as a website built using web technologies but that acts and feels like an app.”

- *Smashing Magazine*

So, what was the web missing?



Add to
Homescreen

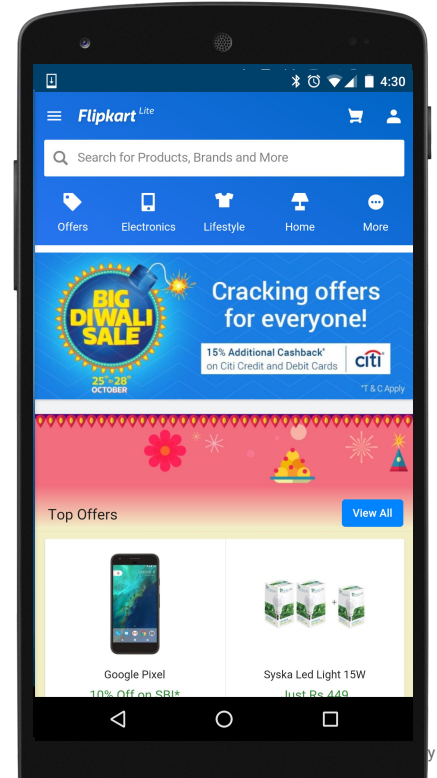
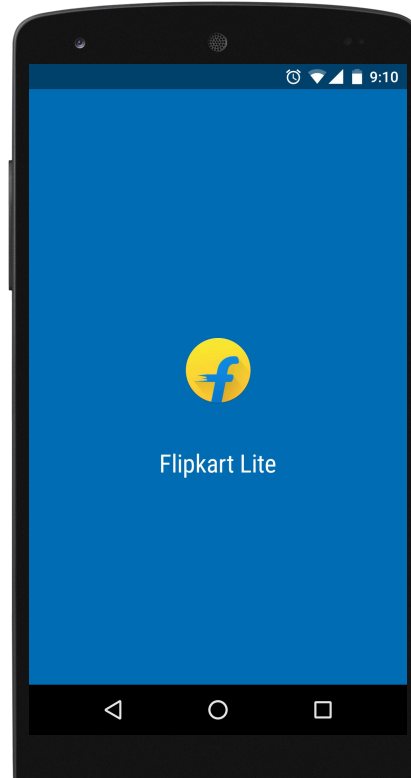
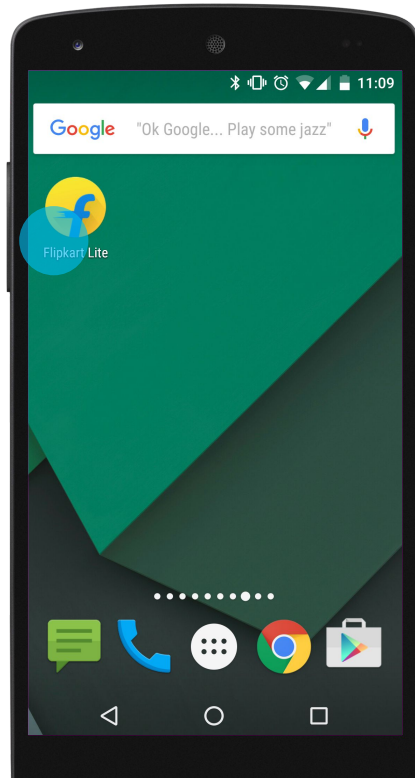
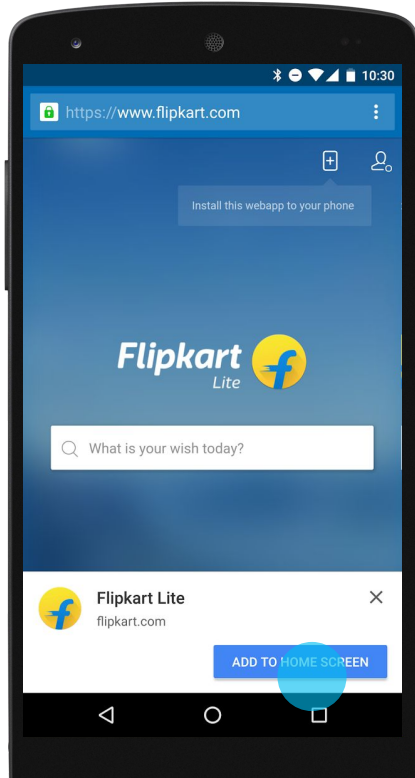


Reliable
Performance

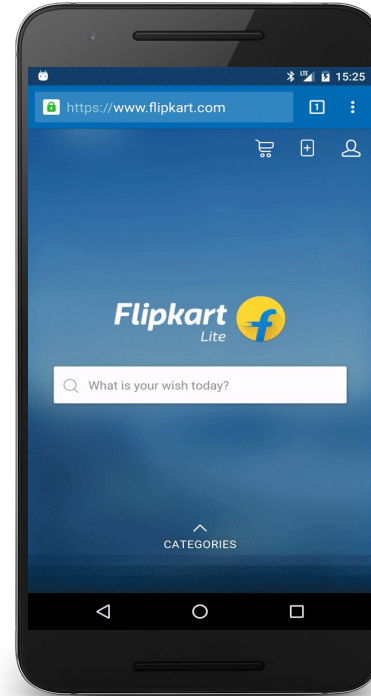
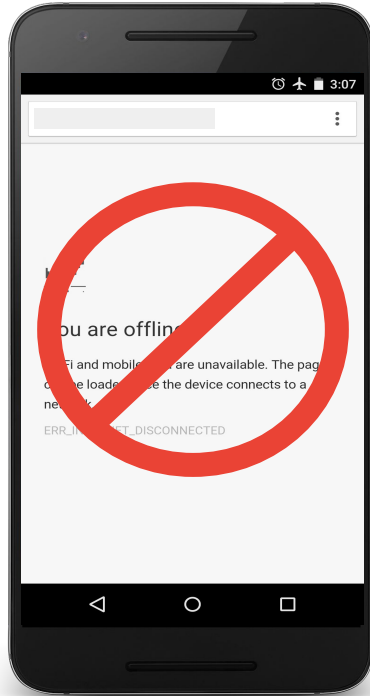


Push
Notifications

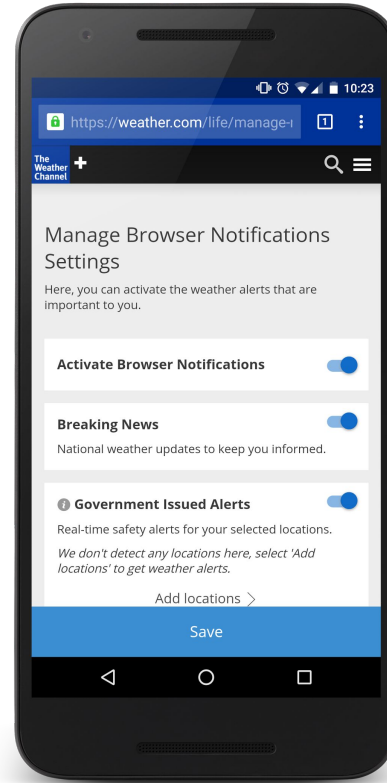
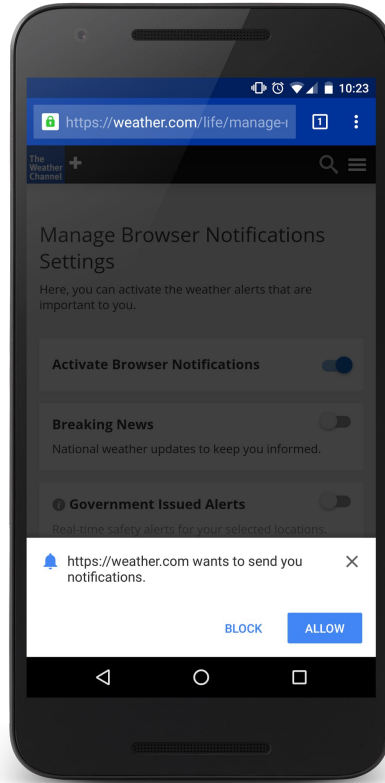
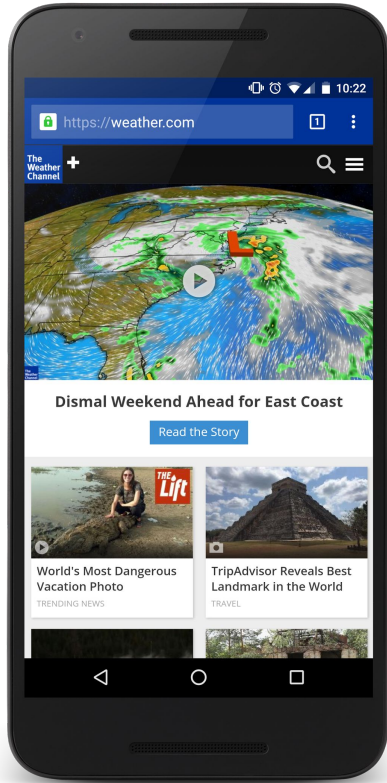
Engage users with home screen icon, fullscreen mode



Be reliable even on flaky networks or offline



Send web push, just like app notifications



AliExpress

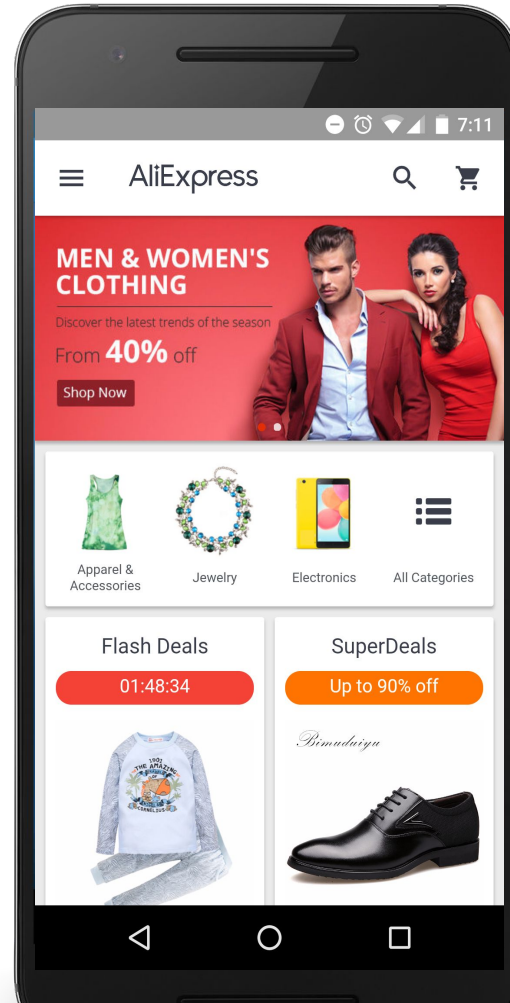
Global online marketplace owned
by Alibaba Group

+104%

increase in conversions
for new users

+74%

higher engagement
(‘time spent’)



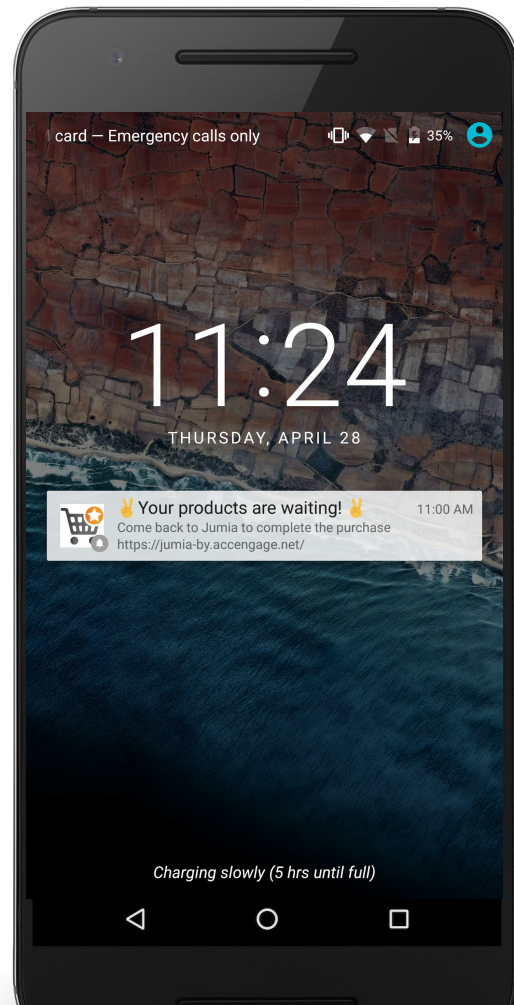


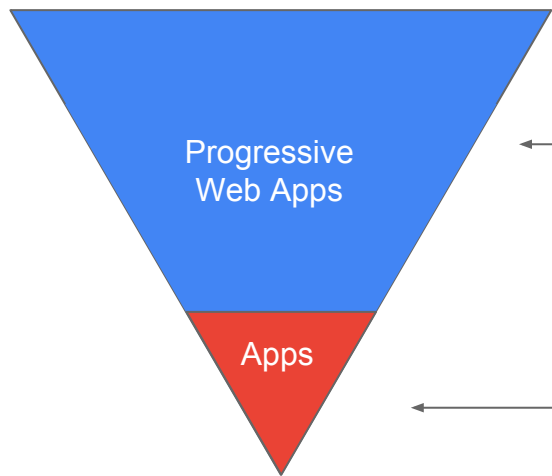
38%

Open rate for push notifications

9x

higher conversions for
previously abandoned carts

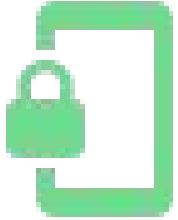




← Opportunity to re-engage with lots more users

← High engagement, but a small piece of overall user traffic

Optimize website conversions



Simple sign in with Credential Manager API



One tap checkout with Payment Request API

Signing in is a big pain point for users

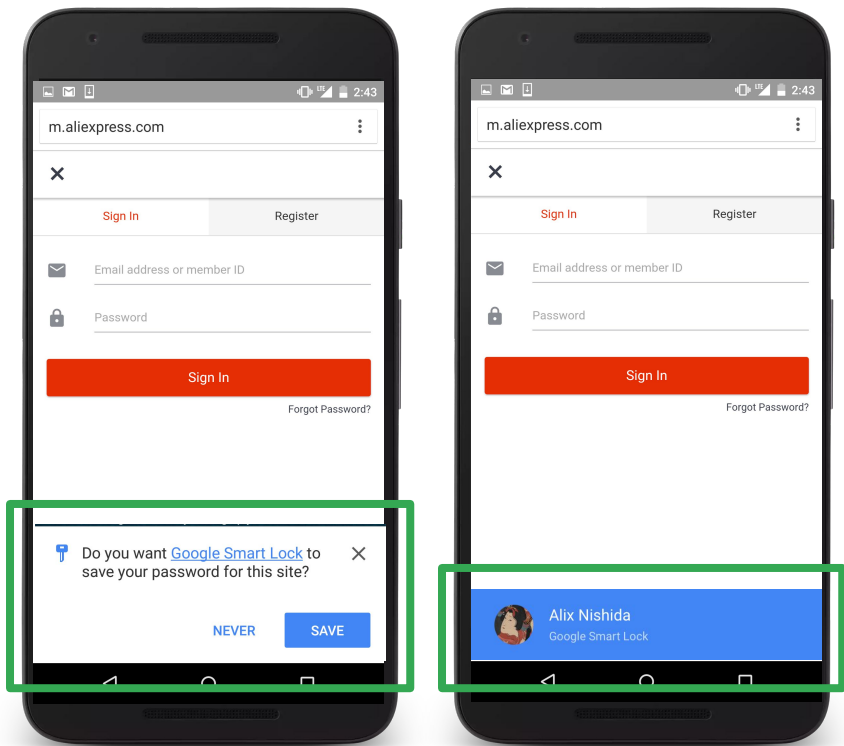
54%

Users will quit
before doing
yet-another-signup

92%

Users will give up if
they don't remember
a username
or password

Credential Manager API: Sign in more easily



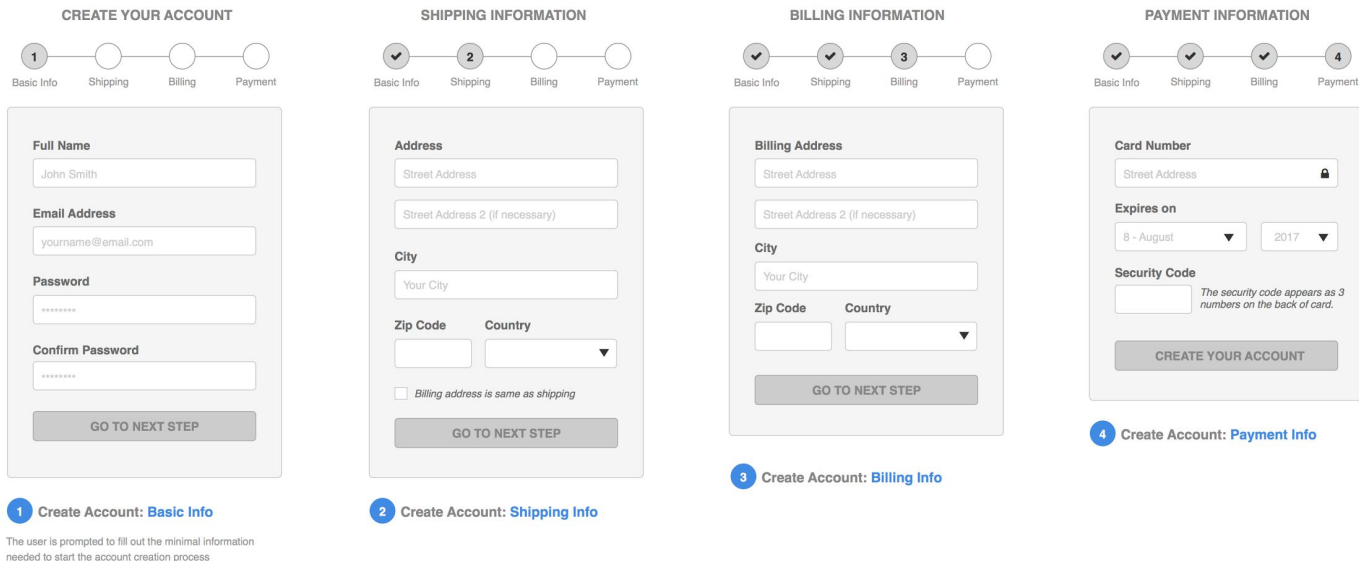
Use **Credential Management API** to have users save info for easy access later.

First-time users: Prompt to save log in credentials to Smart Lock

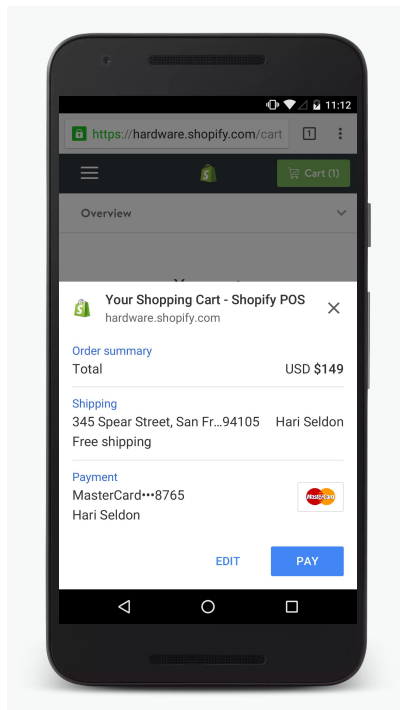
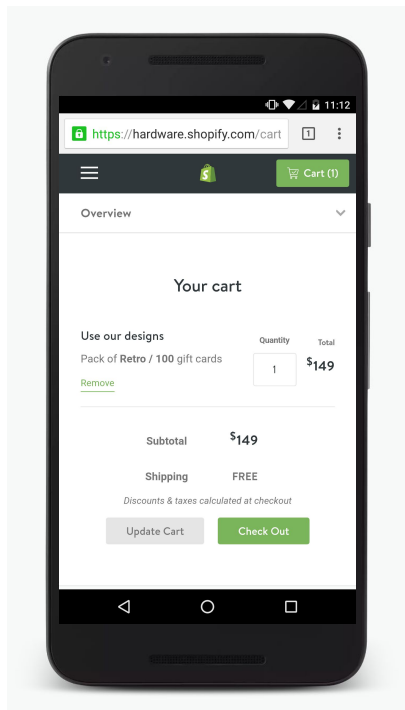
Returning users: Automatically get signed in without having to type in a password!

Too many fields lead up to 97% of checkout abandonment

Checkout Process



Payment Request API: Get through checkout faster

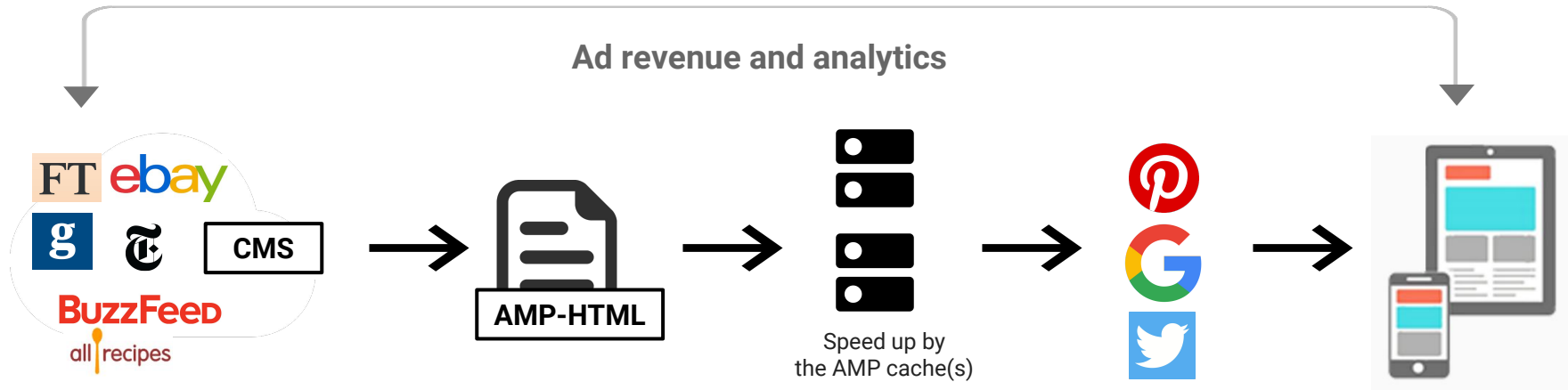


Leverage auto-fill to pre-populate user information.

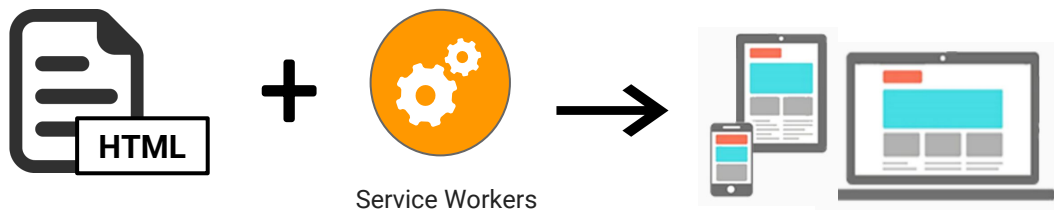
- Click to “buy now”
- See a single page with everything filled out
- Tap to enable checkout in one step with either credit card info or Android Pay (where available)

AMP and PWA

AMP is a robust ecosystem



PWAs are next generation web apps



How do you delight the next billion?

Affordability



Intermittent
Connectivity



Affordable smartphones



$$\text{impact} \propto 1/\text{time} + 1/\text{money}$$

Giving them the
information they want

Can we save them
time?

Can we save them money?

Thank You!