

# Mobile Academy Kiev

14th March 2018

# Agenda

8:30 am - Breakfast, networking, registration

**9:30 am - UX best practices for retail. What you should remember about once you create mobile assets?**

**10:00 am - How to make sure we have best discovery on Mobile for retail company? Why mobile speed is so important? How plan resources for best discovery optimisation?**

**10:30 am - The most efficient ways to optimize speed of mobile assets.**

11:00 am - Coffee break

**11:20 am - What you can do to increase engagement and conversion rate on mobile assets. PWAs, notifications.**

**11:50 am - How to increase conversion rate and retention with Google Pay?**

**12:20 pm - Assets optimisation and testing on Mobile for retail companies. How to optimize mobile assets based on data?**

**12:50 pm - Summary. What is coming next?**

1:05 pm - Lunch



A faint, light blue network diagram is visible in the background on the right side of the slide. It consists of several circular nodes connected by thin lines. Each node contains a different icon representing various digital marketing or user experience concepts: a thumbs-up (like), a video camera, an upload arrow, a clock, a heart, an eye, a speaker, headphones, a speech bubble, and a play button.

UX best practices for retail. What you should remember about once you create mobile assets?

## Creating frictionless experiences across the funnel

After looking at several hundred retail sites, we realized that there were certain universal UX elements that helped create a frictionless shopping experience. This list aims to expand on the [25 Retail Principles](#) and provide a checklist for improving your mobile site experience across 6 key site areas:

1. HOME/LANDING PAGE

2. MENU & NAVIGATION

3. SEARCH

4. CATEGORY/PRODUCT

5. CONVERSION

6. FORM OPTIMIZATION



All recommendations  
should be A/B tested!

# What can we learn from “Best-In-Class”



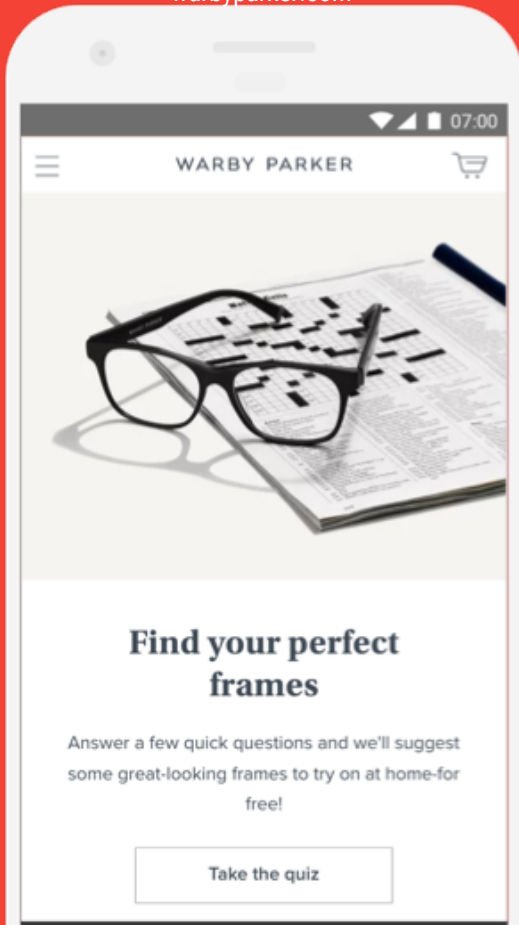
Homepage / Landing Page

# Creating frictionless experiences across the funnel (RETAIL)

1. HOME/LANDING PAGE					2. MENU & NAVIGATION	3. SEARCH	4. CATEGORY/PRODUCT	5. CONVERSION	6. FORM OPTIMIZATION
SECTION	Homepage/Landing Page	Ease of implementation	Impact	Key Metric					
KEY SUGGESTION	Clear CTA above the fold	Easy	High	Clicks on CTA, Bounce rate					
	Have descriptive CTAs	Easy	Medium	Clicks on CTA, Bounce rate					
	Clear benefit-oriented value prop above the fold	Easy	High	Bounce Rate, CVR					
	Don't use full page interstitials	Easy	High	Bounce Rate					
	Remove automatic carousels	Easy	High	Bounce Rate					
	Display top categories on homepage	Medium	High	Bounce Rate, Clicks on category					
	Use social proof	Easy	Medium	CVR					
	Use legible font sizes (16px+)	Easy	High	Time on site					

# DISPLAY A CLEAR CTA ABOVE THE FOLD (Specialty retail)

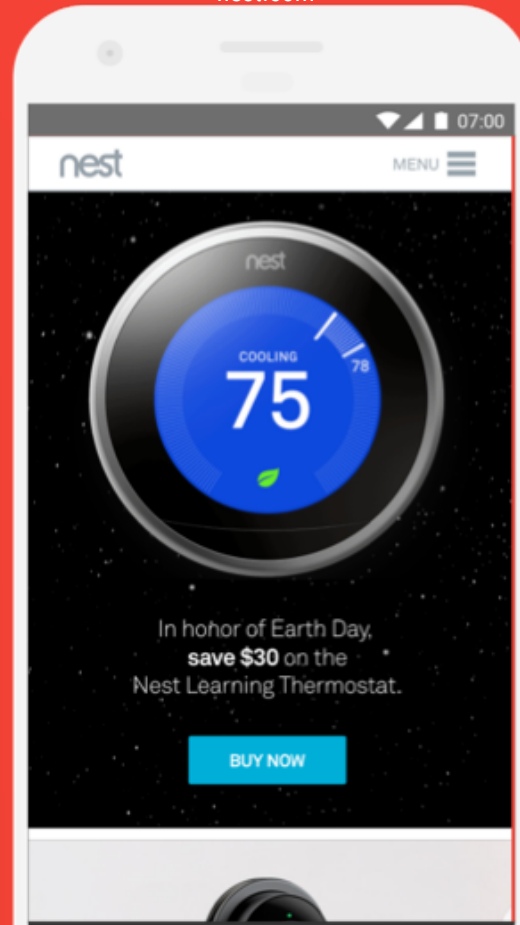
warbyparker.com



tuftandneedle.com

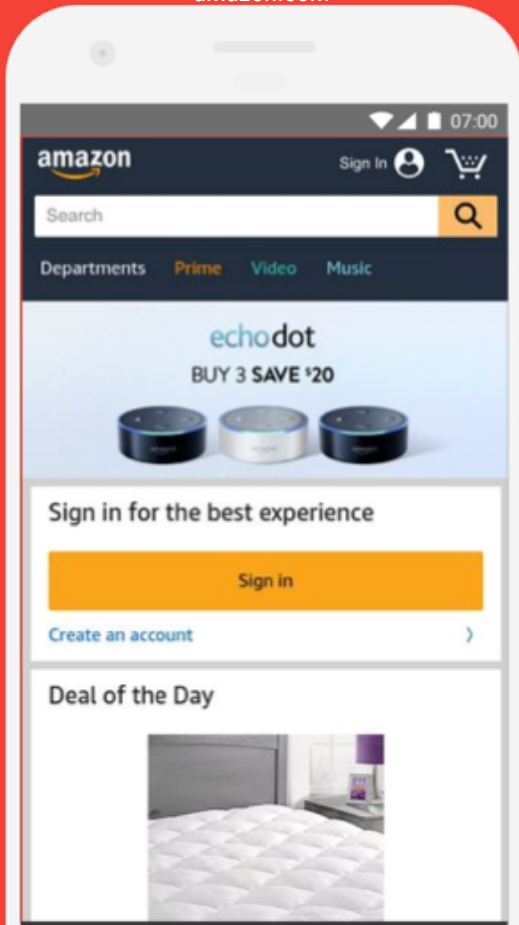


nest.com

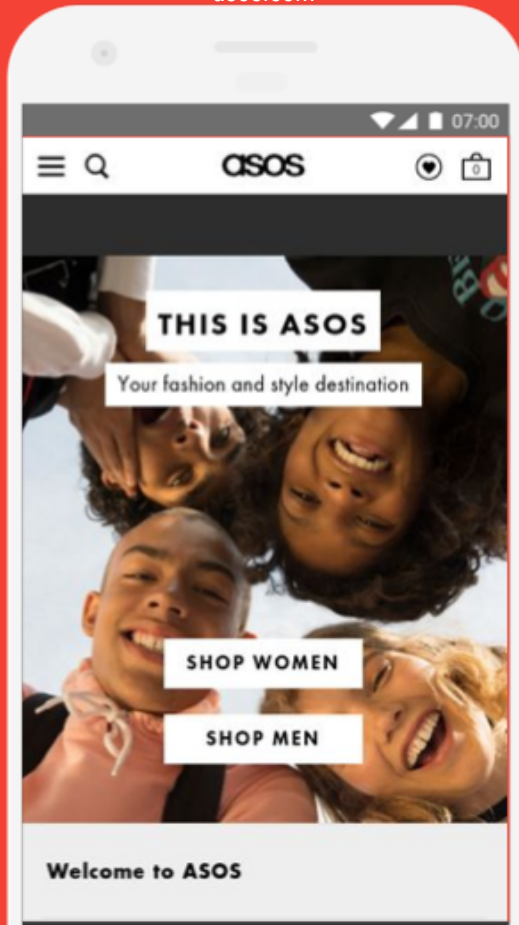


# DISPLAY A CLEAR CTA ABOVE THE FOLD (large inventory)

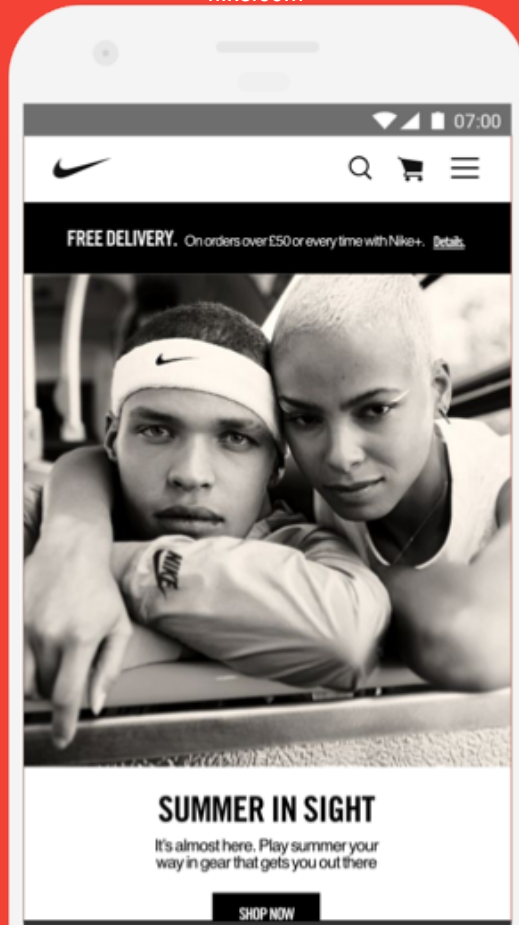
amazon.com



asos.com



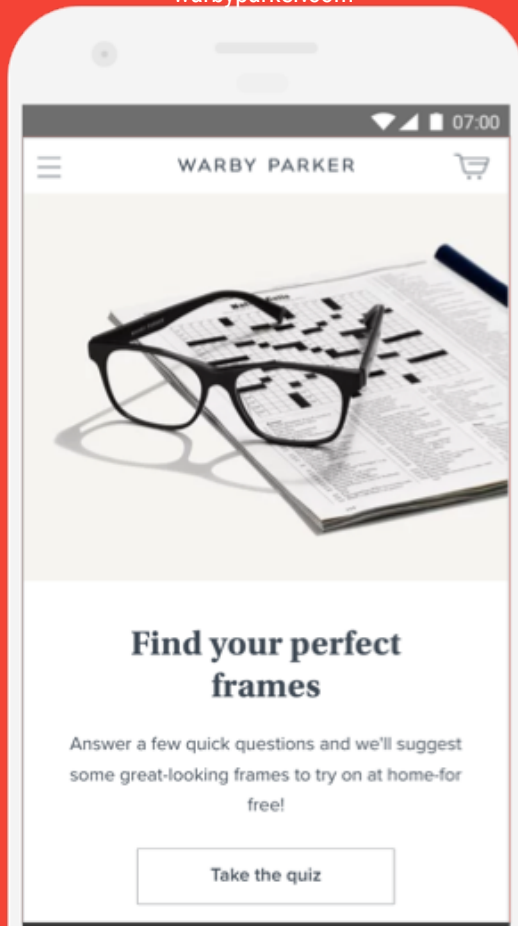
nike.com





# HAVE DESCRIPTIVE CTAS (not next, shop, continue)

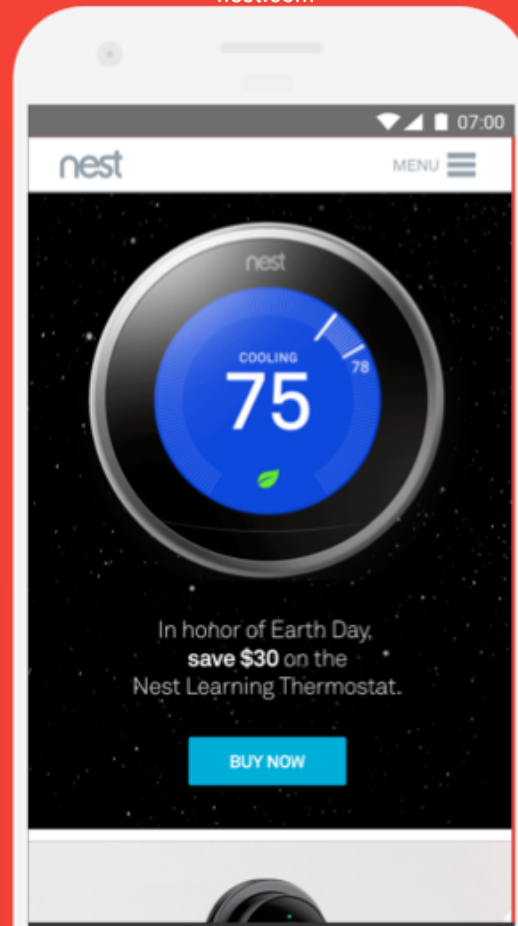
warbyparker.com



tuftandneedle.com

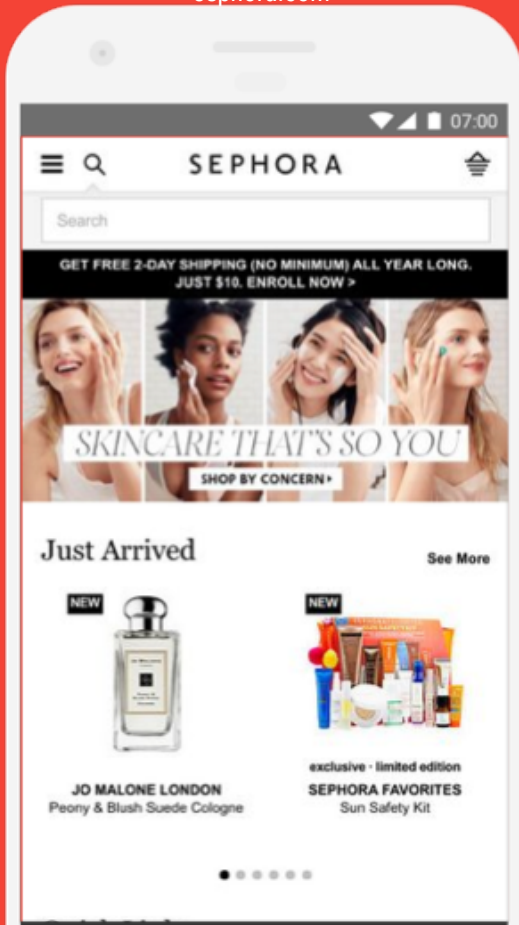


nest.com



# DISPLAY A CLEAR BENEFIT-ORIENTED VALUE PROP ABOVE THE FOLD

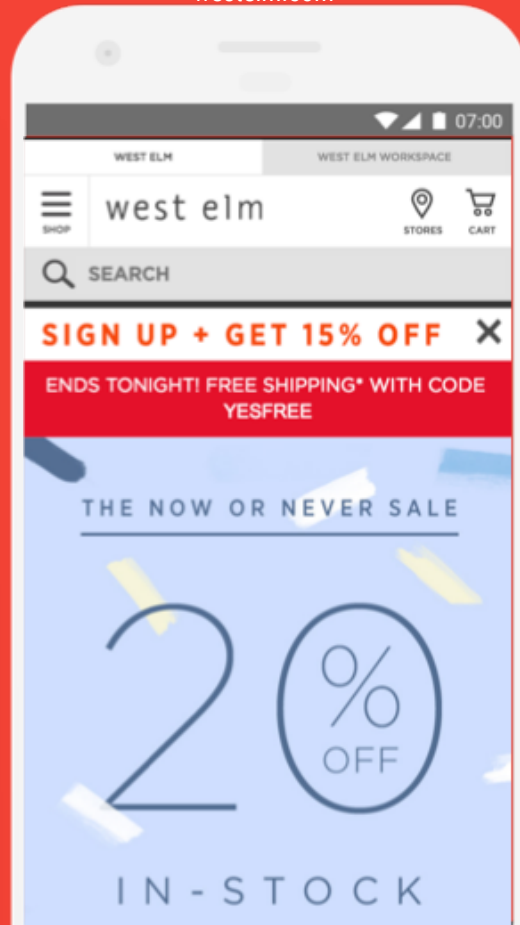
sephora.com



target.com

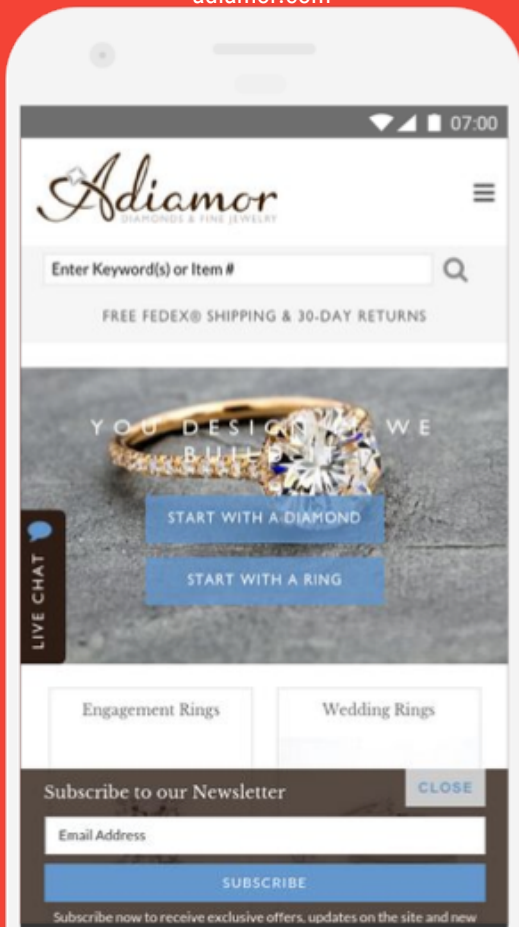


westelm.com

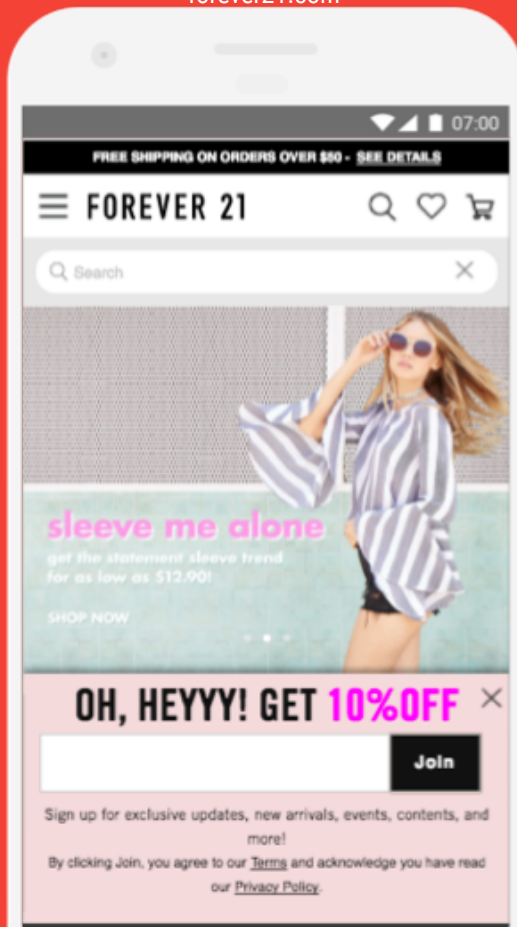


# DON'T USE FULL PAGE INTERSTITIALS

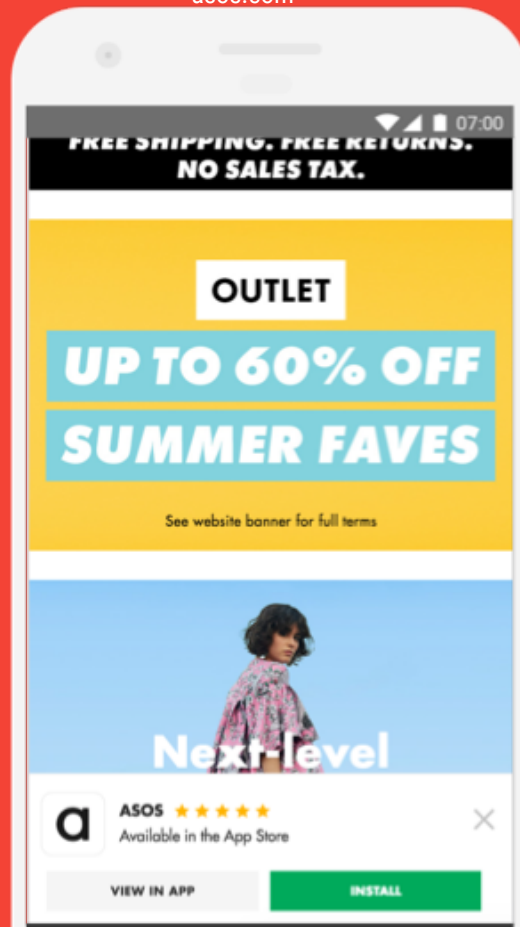
adiamor.com



forever21.com

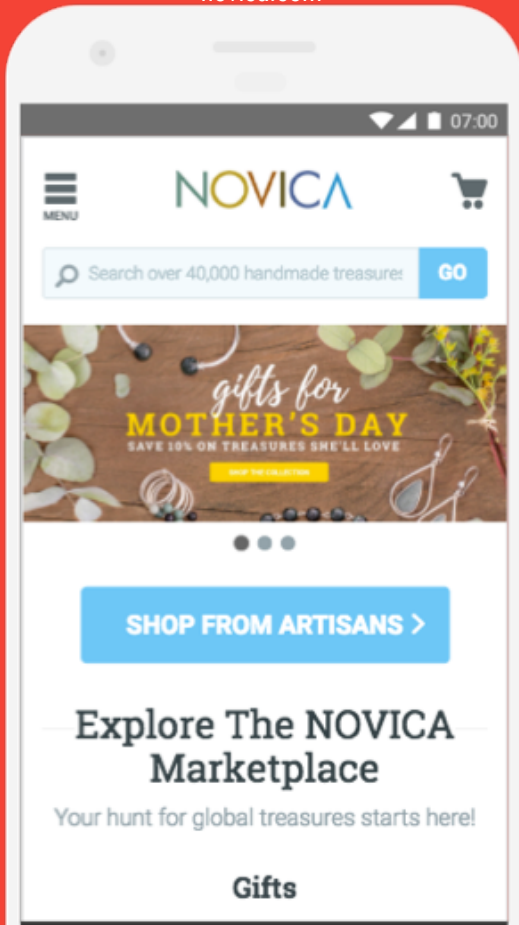


asos.com

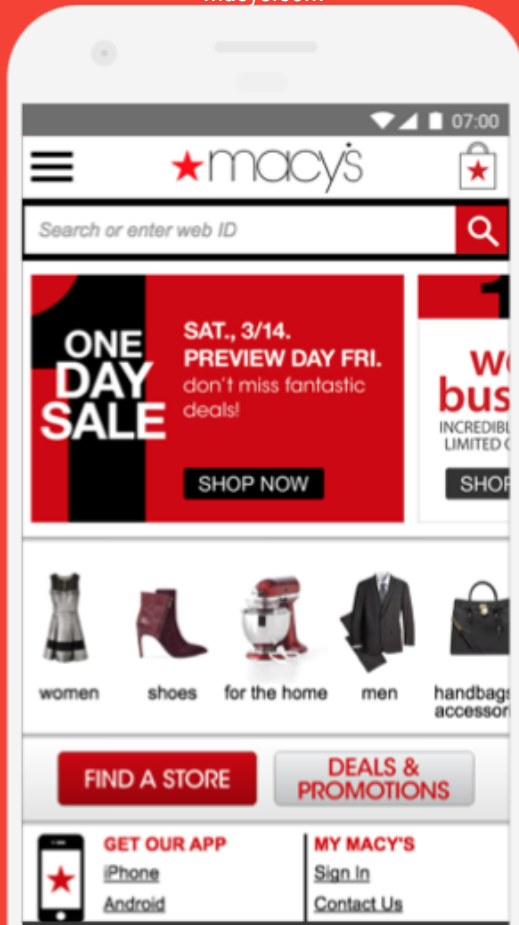


# REMOVE AUTOMATIC CAROUSELS, INSTEAD OPT FOR USER INITIATED

novica.com



macys.com

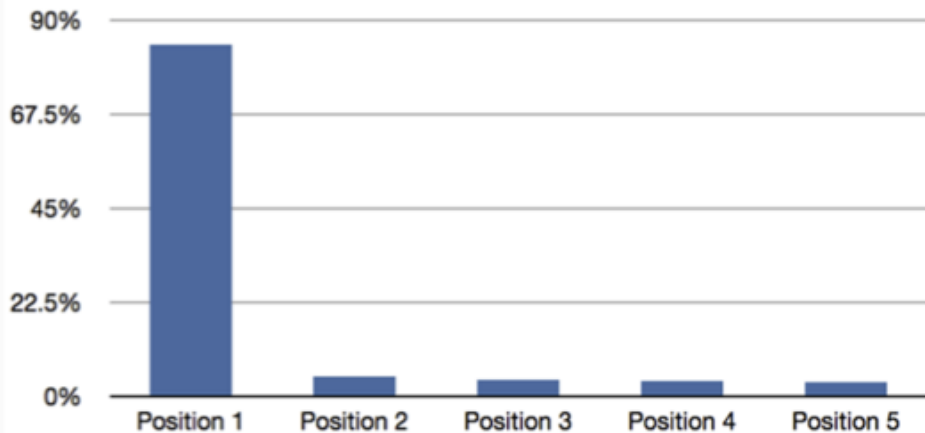


asos.com



# Research shows that carousels rarely work

ND.edu Feature Click-Through Rate



Carousels can be perceived as banners and therefore will be ignored. The user should always be in control.

Automatic image sliders or carousels on homepage should be avoided or the frequency should be decreased.

- **Reason #1:** Human eye reacts to movement (and will miss the important stuff)
- **Reason #2:** Too many messages equals no message
- **Reason #3:** Banner blindness



Luke Wroblewski  
@lukew



Following

.@erunyon basically that data tells me don't use carousels. cc/ @brad\_frost

← Reply ↻ Retweet ★ Favorite ... More

RESEARCH:

[Conversion XL](#)

[ClickZ](#)

[Widerfunnel](#)

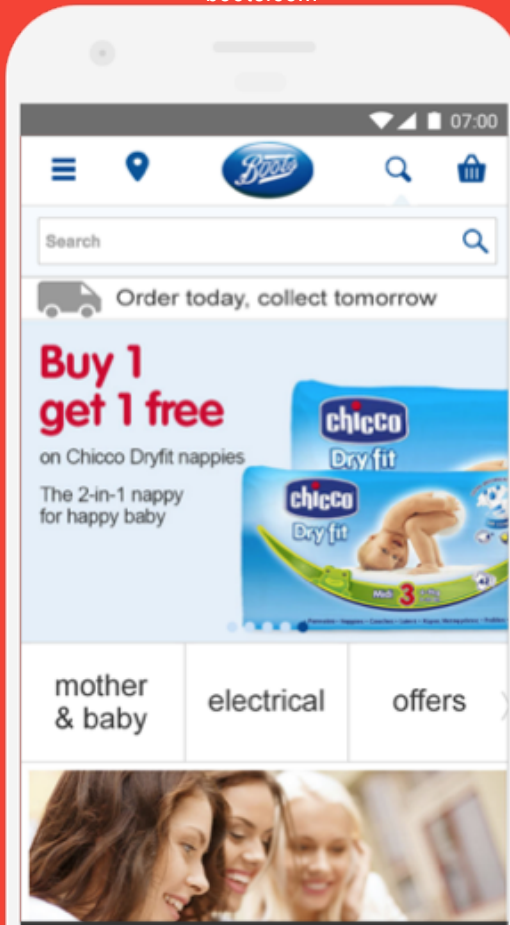
[NN Group](#)

[Erik Runyon](#)

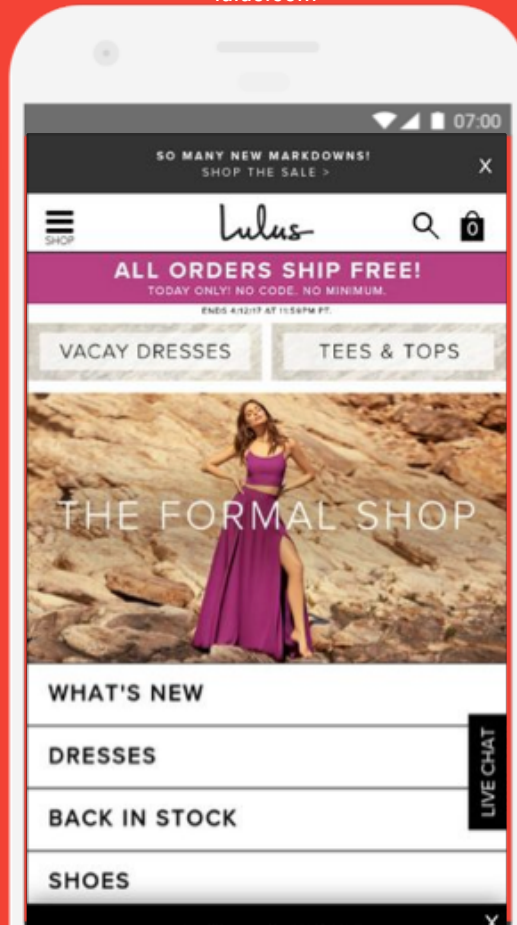


# SHOW TOP CATEGORIES ON HOMEPAGE

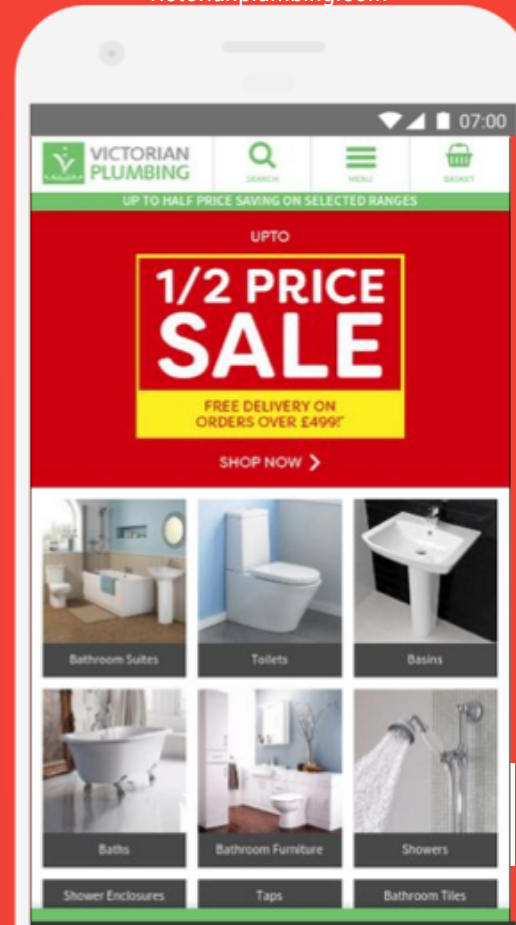
boots.com



lulus.com

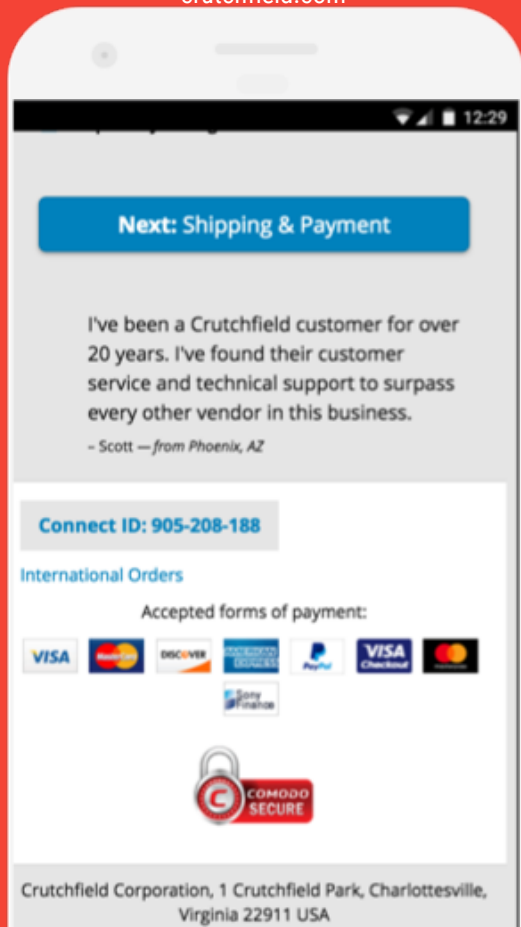


victorianplumbing.com

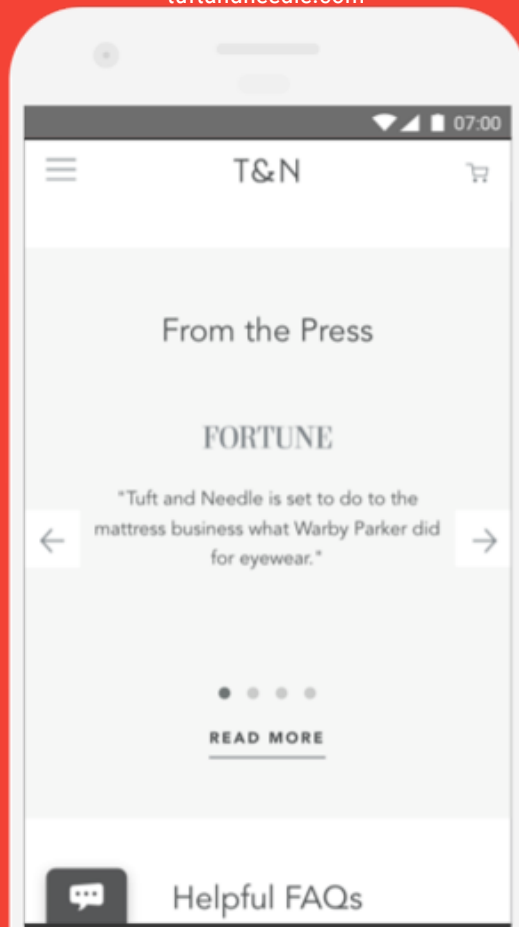


# USE SOCIAL PROOF

crutchfield.com



tuftandneedle.com



poshmark.com



# Menu & Navigation

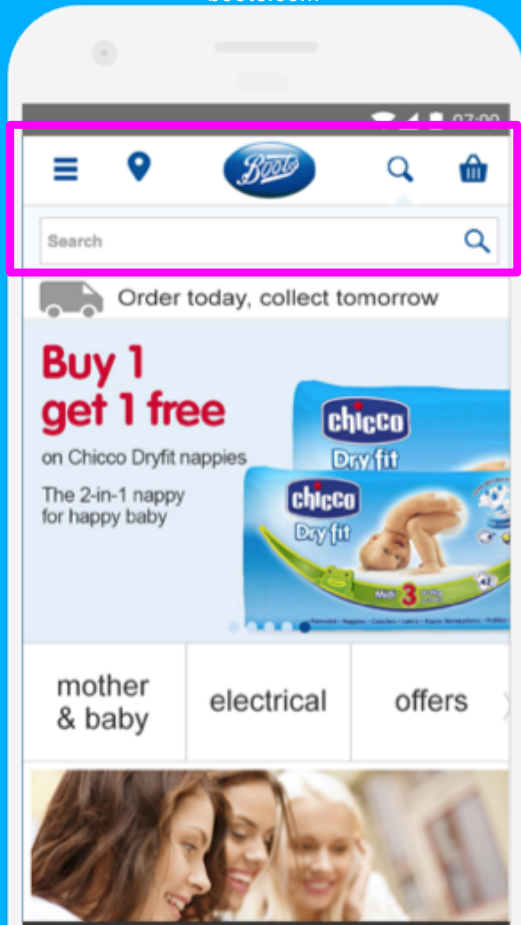


# Creating frictionless experiences across the funnel (RETAIL)

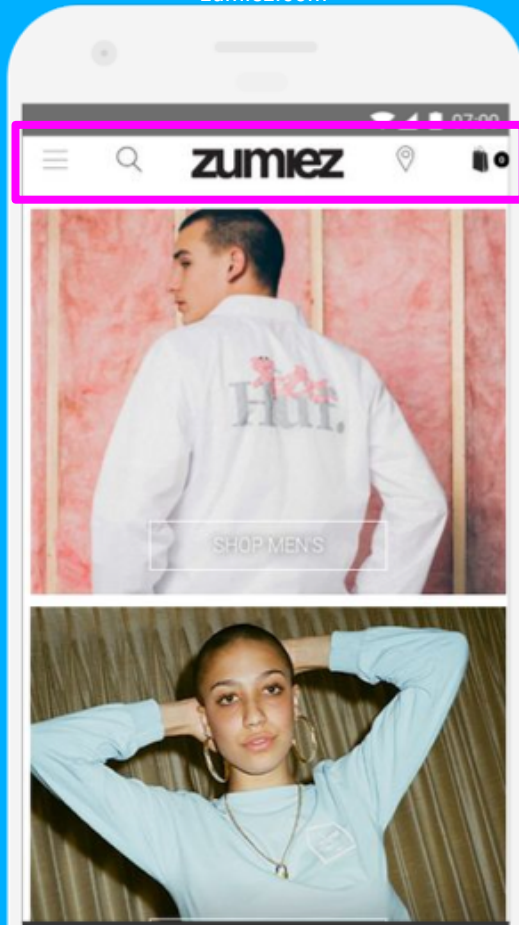
1. HOME/LANDING PAGE		2. MENU & NAVIGATION		3. SEARCH	4. CATEGORY/PRODUCT	5. CONVERSION	6. FORM OPTIMIZATION
SECTION	Menu & Navigation	Ease of implementation	Impact	Key Metric			
KEY SUGGESTION	Show consolidated menu	Medium	High	Pages/visit increase			
	If calls are important, include click-to-call at the top of every page	Easy	High	Clicks on icon			
	If foot traffic is important, include a store locator button in the menu	Easy	High	Clicks on icon			
	Keep menu options on one page	Medium	Medium	Pages per visit			
	For main product categories, order by traffic volume	Easy	Medium	Pages per visit			
	If using subcategories, organize alphabetically	Easy	Medium	Pages per visit			
	Include post sales activities in the menu	Easy	Medium	Pages per visit			

# SHOW CONSOLIDATED MENU (LESS THAN 1/5 OF PAGE)

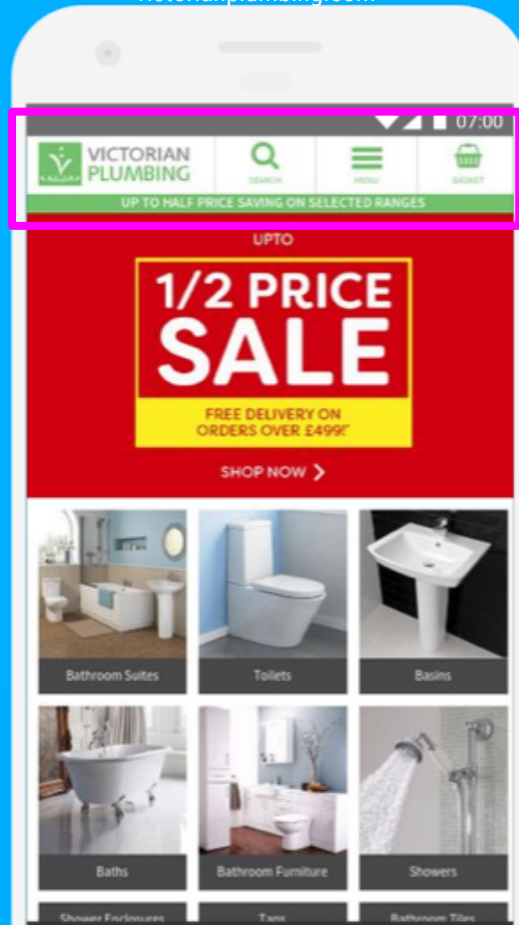
boots.com



zumiez.com

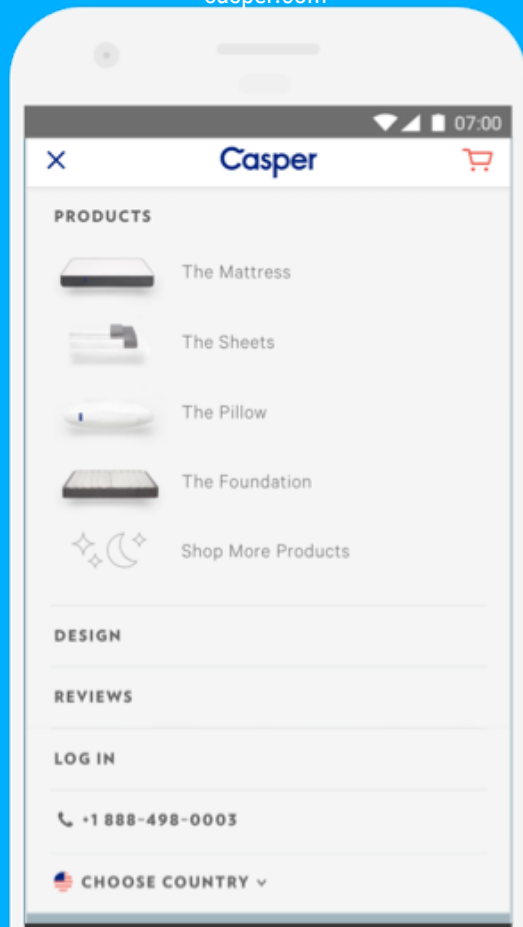


victorianplumbing.com

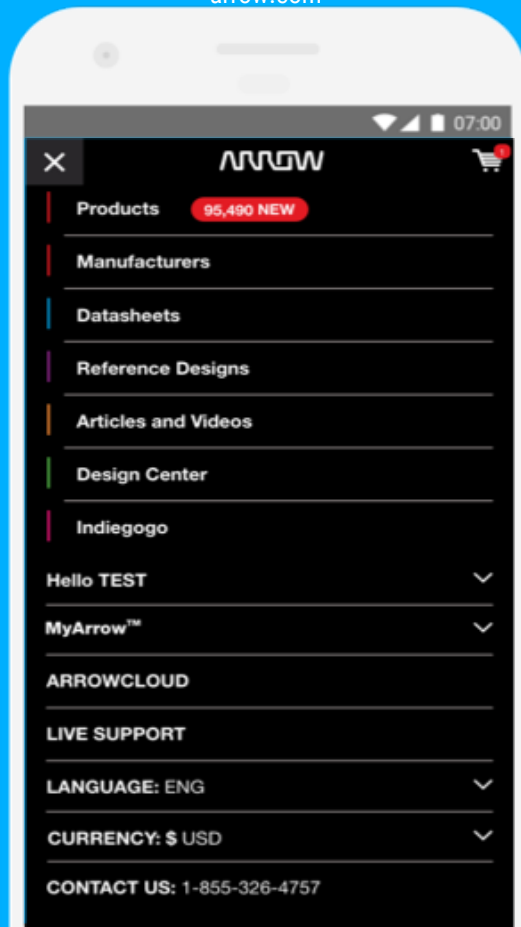


# IF CALLS ARE IMPORTANT, INCLUDE PHONE ICON/NUMBER IN MENU

casper.com



arrow.com



# IF YOU HAVE A PHYSICAL STORE, INCLUDE STORE LOCATOR ICON IN HEADER OR MENU

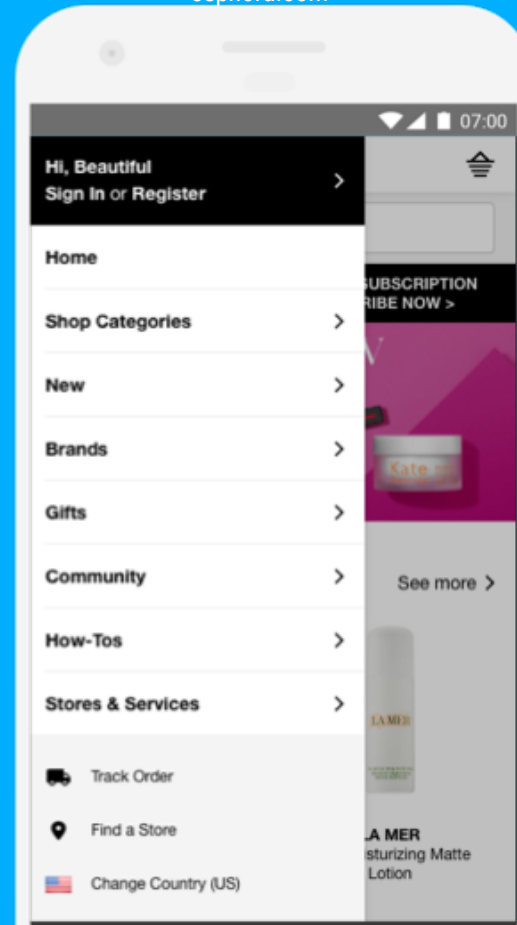
charlestyrwhitt.com



hay.com

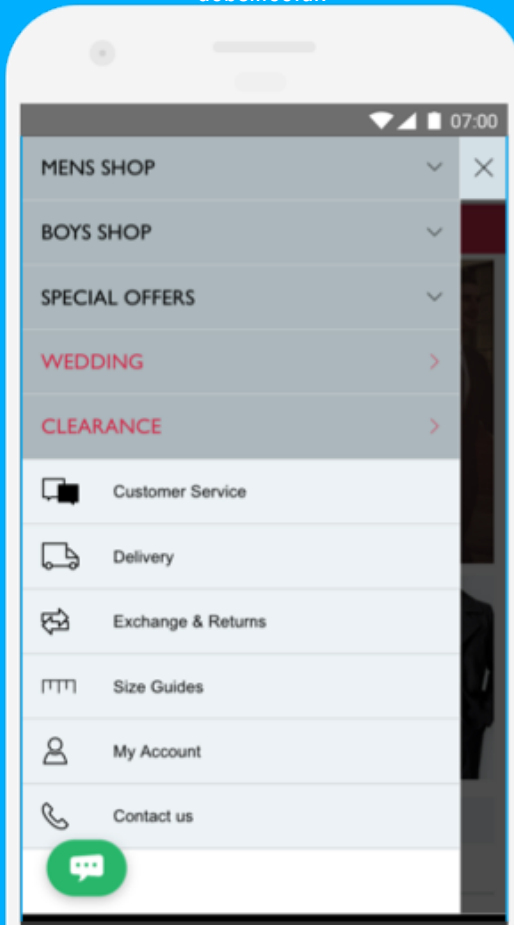


sephora.com

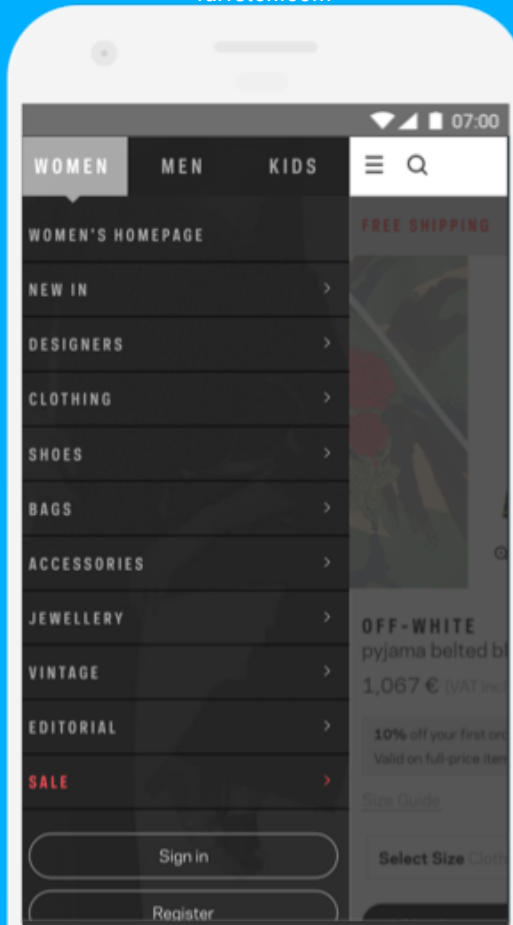


# KEEP THE MENU ON ONE PAGE, USE A DYNAMIC MENU OR EXPANDERS

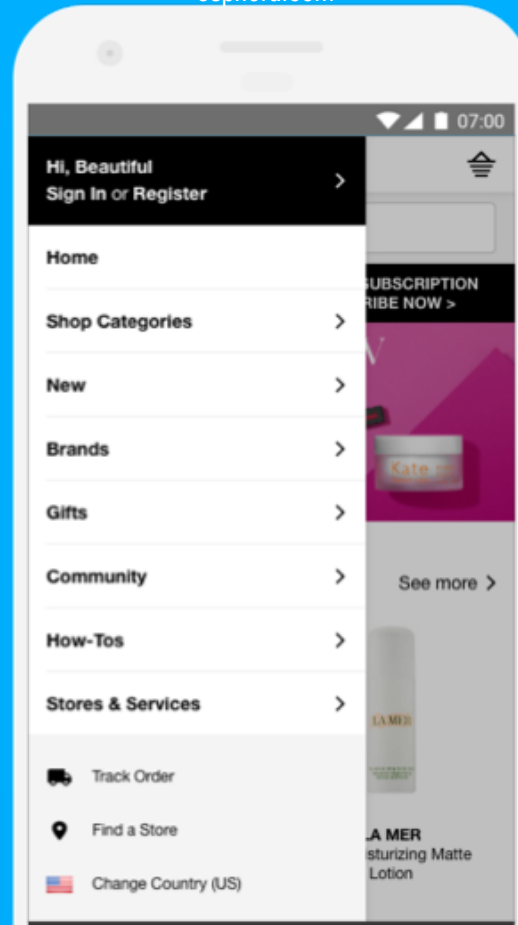
dobell.co.uk



farfetch.com

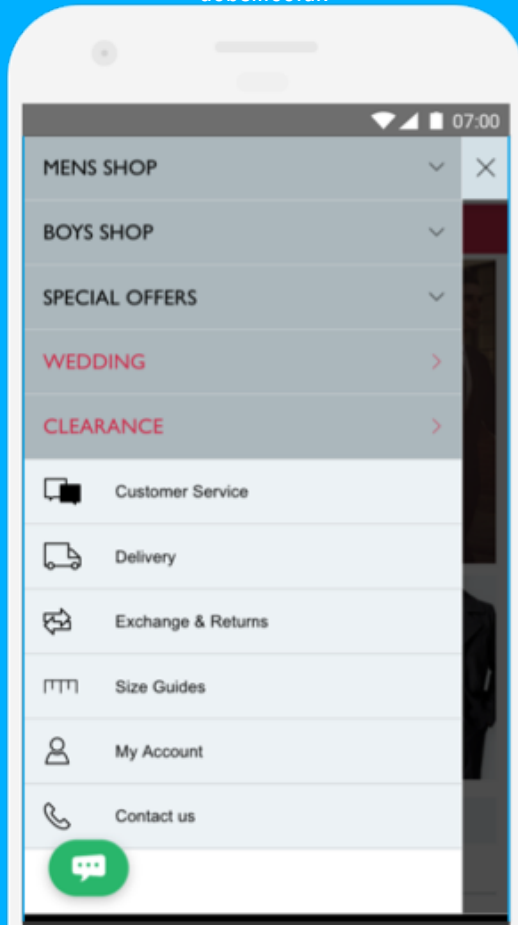


sephora.com

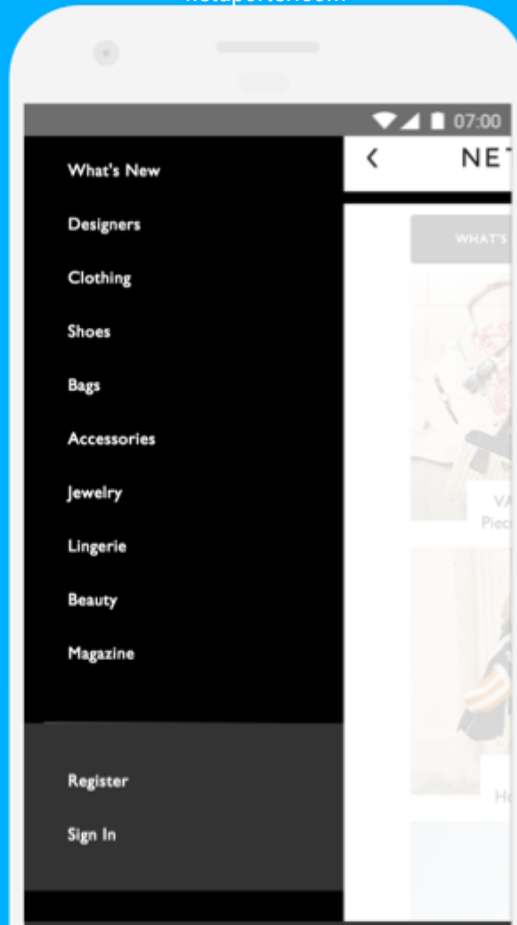


# INCLUDE POST-SALES ACTIONS IN THE MENU

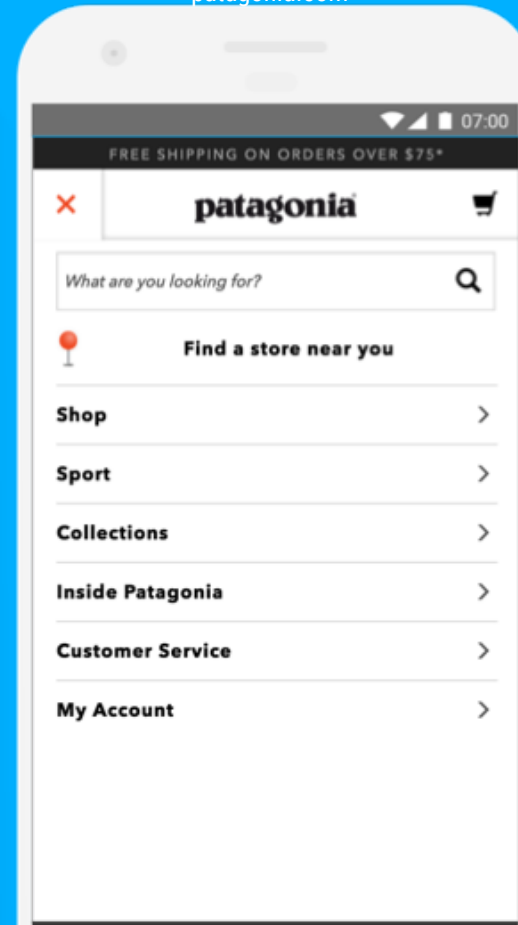
dobell.co.uk



netaporter.com



patagonia.com

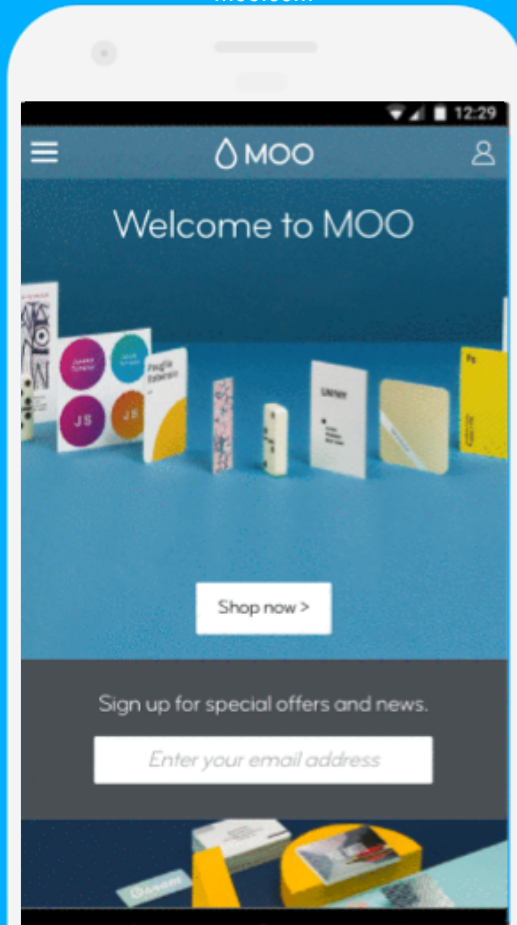


## Bonus: CONSIDER A FLOATING MENU THAT STICKS AS USERS SCROLL

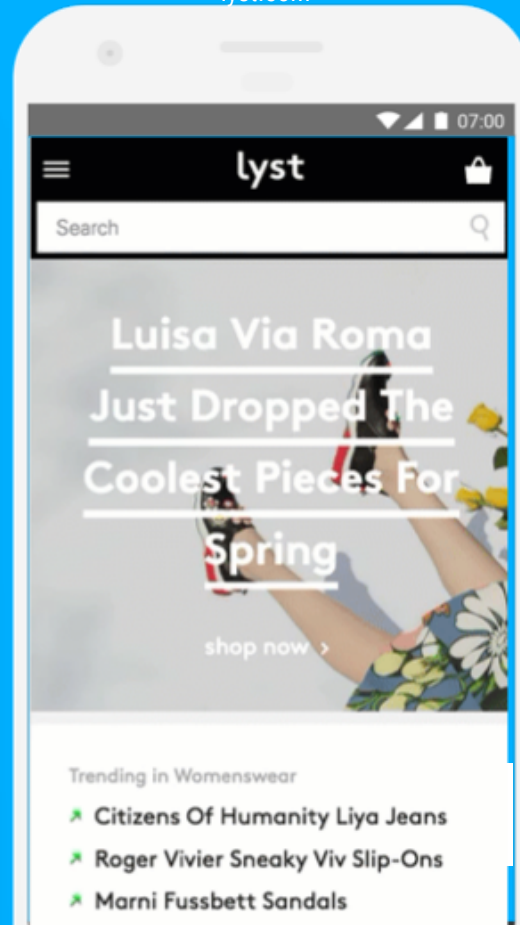
cos.com



moo.com



lyst.com



Search

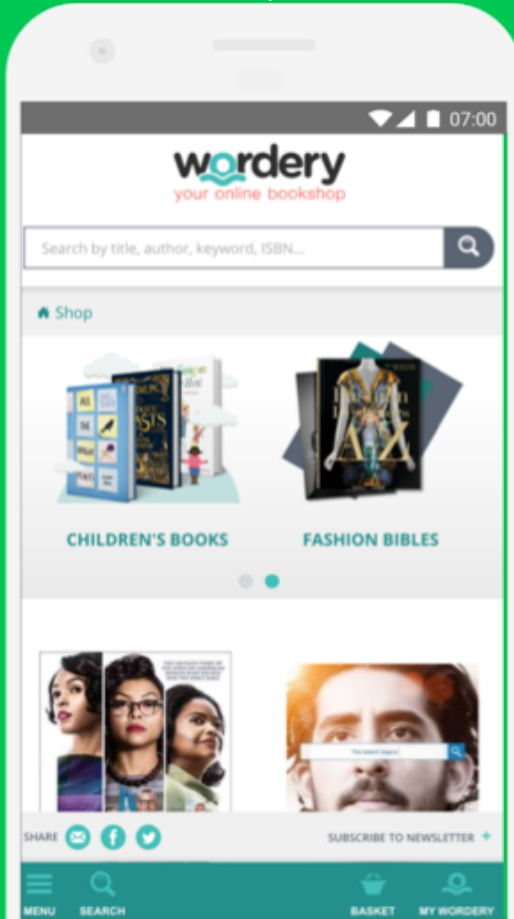


# Creating frictionless experiences across the funnel (RETAIL)

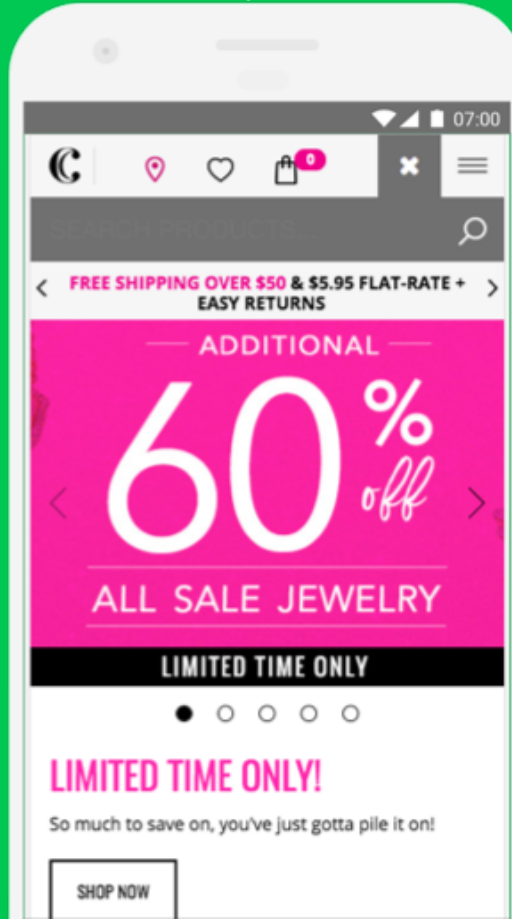
1. HOME/LANDING PAGE		2. MENU & NAVIGATION		3. SEARCH	4. CATEGORY/PRODUCT	5. CONVERSION	6. FORM OPTIMIZATION
SECTION	Menu & Navigation	Ease of implementation		Impact	Key Metric		
KEY SUGGESTION	Include search	Hard		High	% traffic w/ searches, cvr		
	Make search visible	Easy		High	% traffic w/ searches, search depth		
	Use auto-suggestions	Medium		High	Bounce rate on traffic w/ searches, search depth		
	Implement spelling correction	Medium		Medium	Bounce rate on traffic w/ searches, search depth		
	Always return results	Medium		Medium	Bounce rate on traffic w/ searches, search depth		
	Include previous or top searches	Medium		Medium	Bounce rate on traffic w/ searches, search depth		

# PROMINENT SEARCH (users that search are 200% more likely to convert)

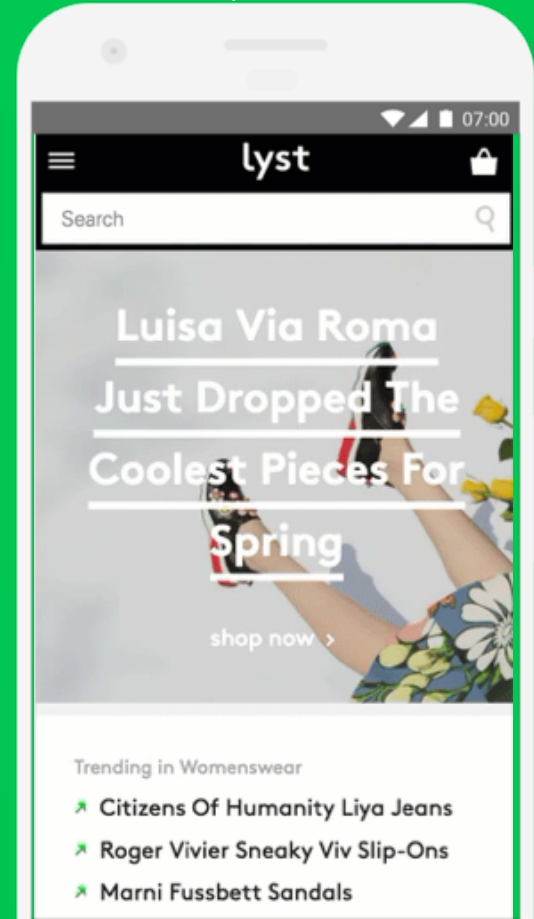
wordery.com



charmingcharlie.com

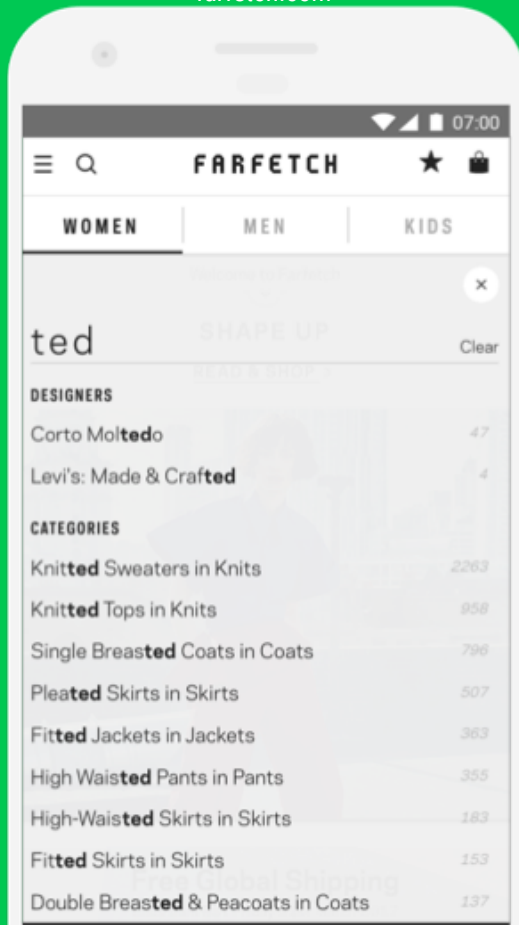


lyst.com

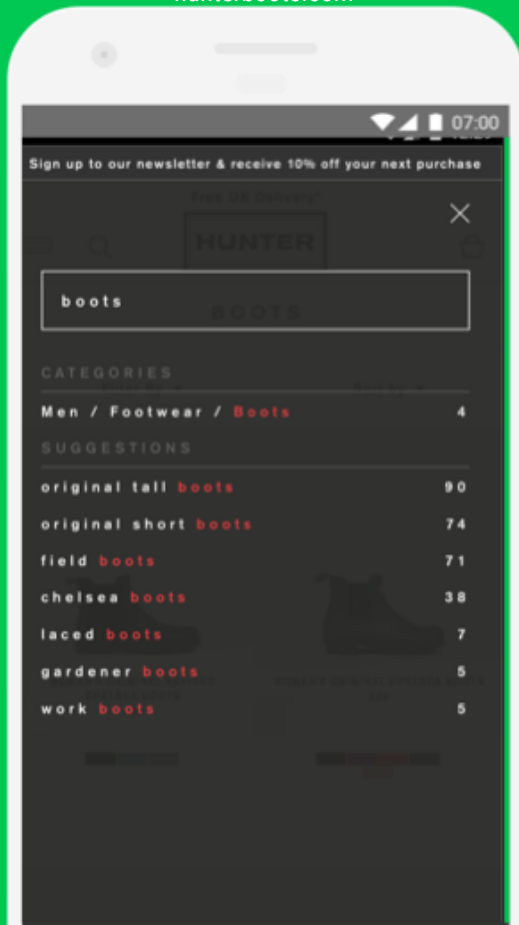


# USE AUTO-SUGGESTIONS

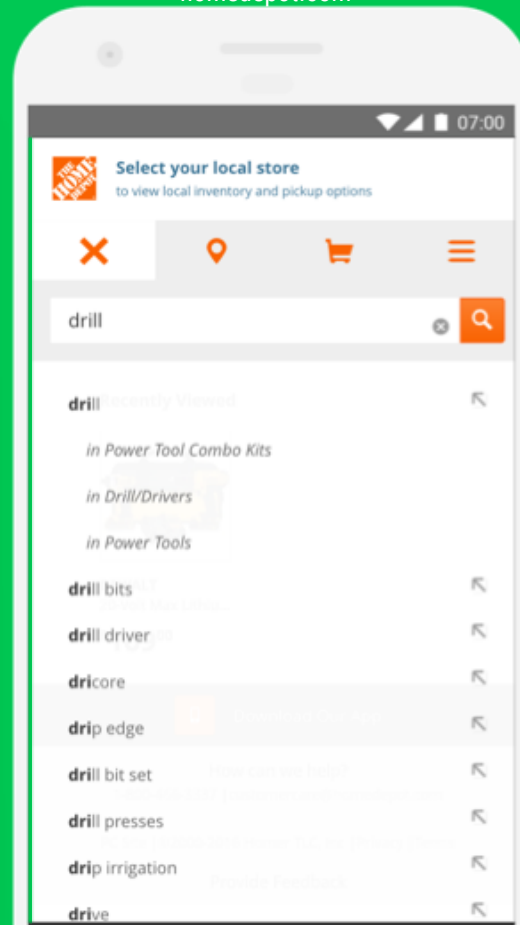
farfetch.com



hunterboots.com

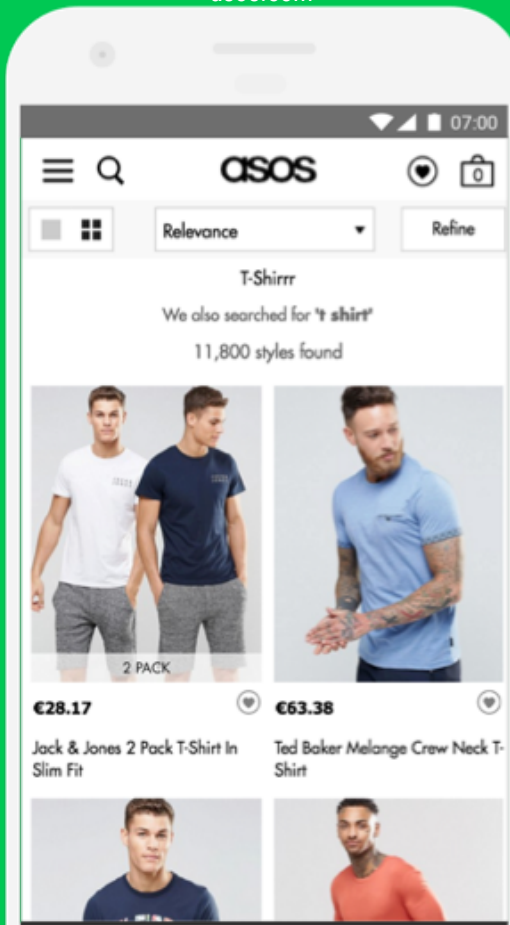


homedepot.com

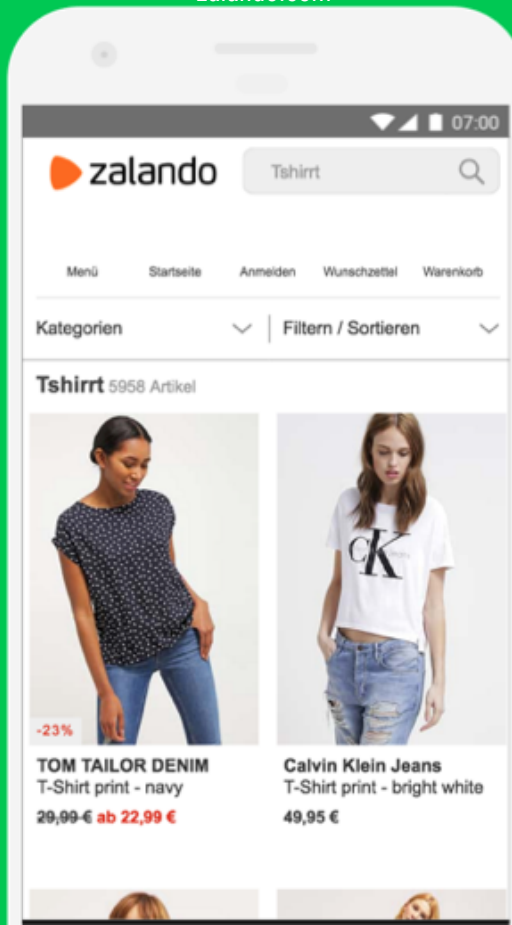


# IMPLEMENT SPELLING CORRECTIONS

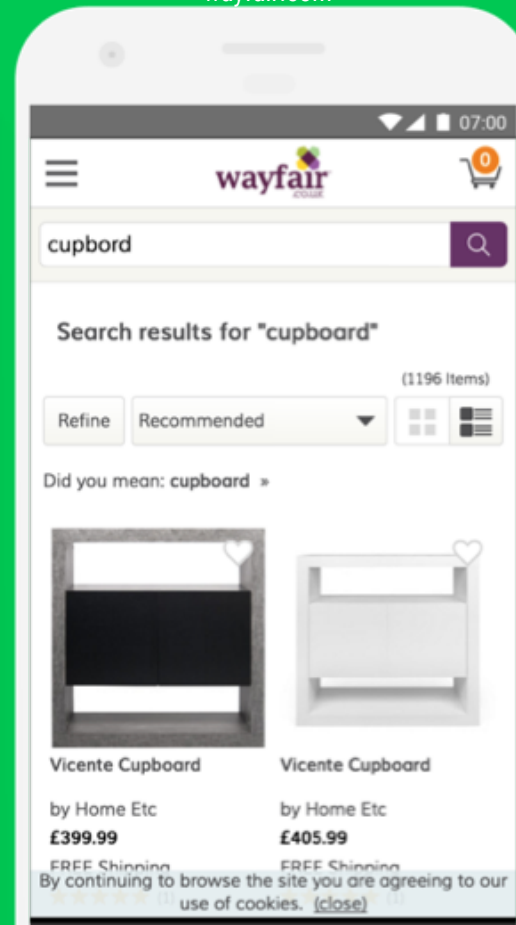
asos.com



zalando.com

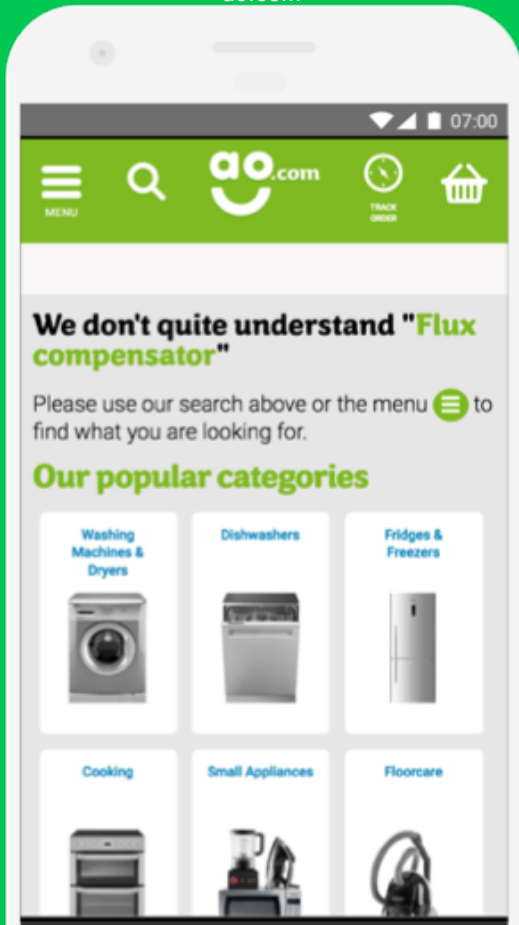


wayfair.com

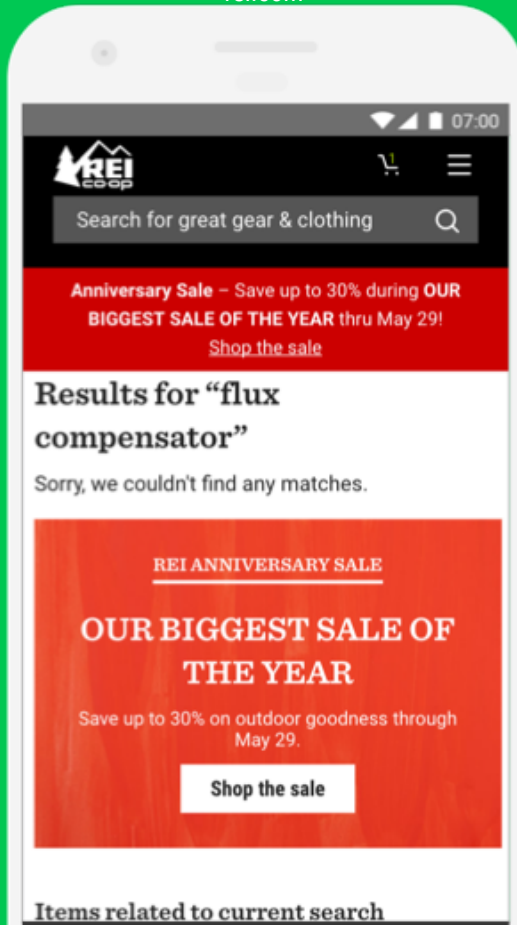


# ALWAYS RETURN RESULTS

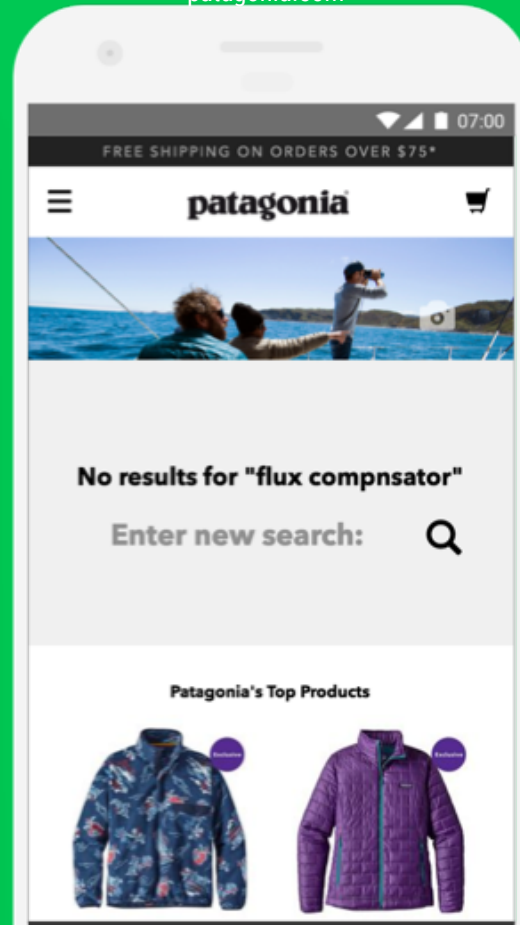
ao.com



rei.com

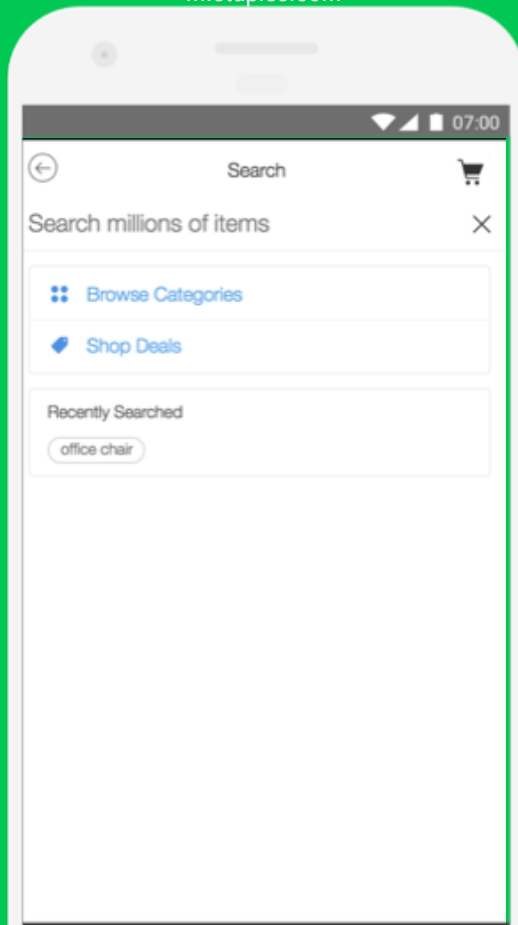


patagonia.com

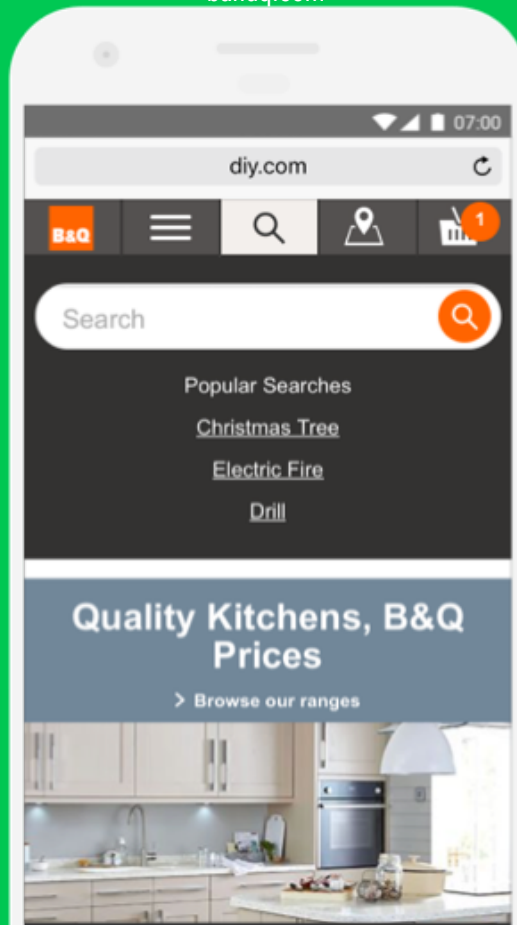


# INCLUDE PREVIOUS OR PAST SEARCHES

m.staples.com



bandq.com



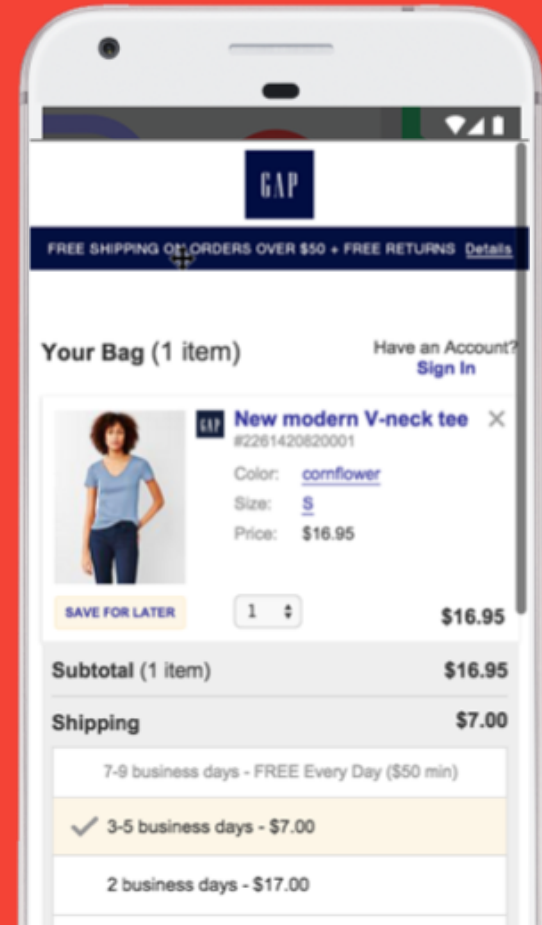
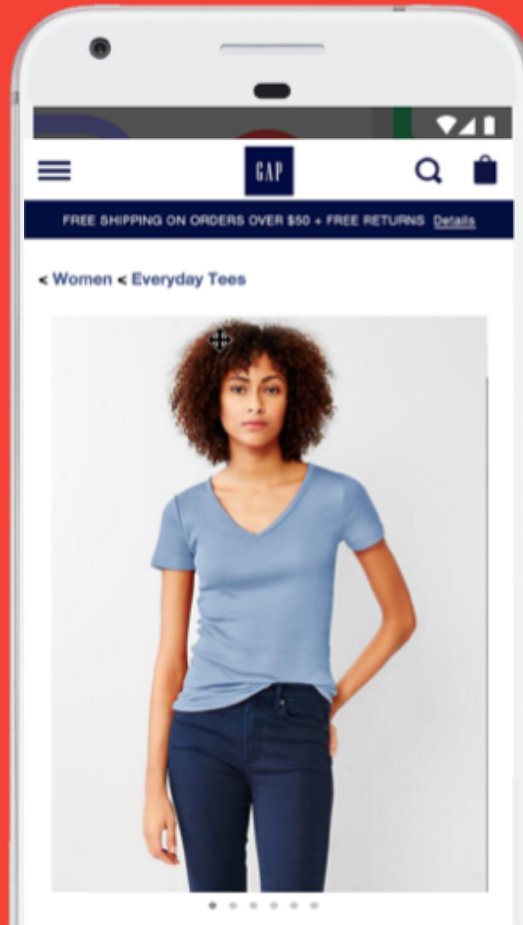
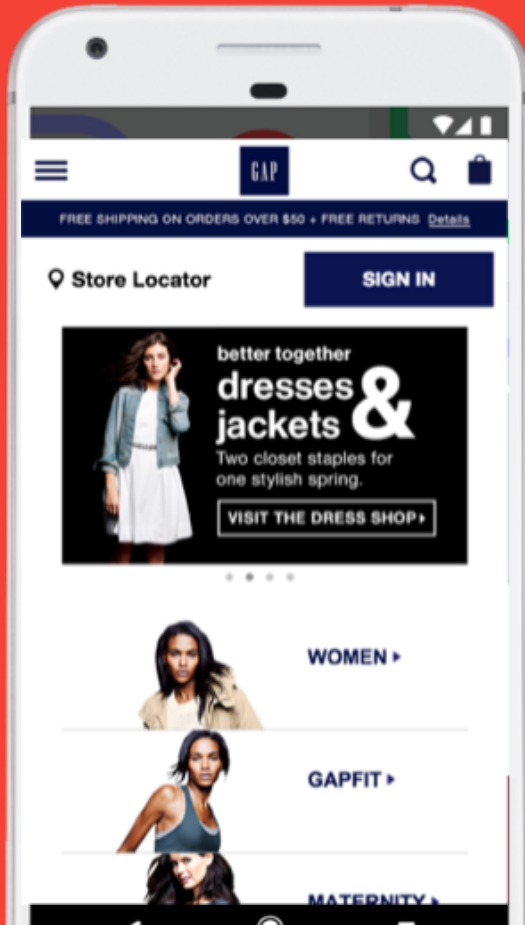
Category/Product

# Creating frictionless experiences across the funnel (RETAIL)

1. HOME/LANDING PAGE		2. MENU & NAVIGATION		3. SEARCH	4. CATEGORY/PRODUCT	5. CONVERSION	6. FORM OPTIMIZATION
SECTION	Category/Product	Ease of Implementation		Impact	Key Metric		
KEY SUGGESTION	Have a value prop at every point in the funnel, including category and product pages	Easy		High	cvr, exit rate after add to cart		
	Allow users to sort/filter large number of products easily	Medium		High	bounce rate on category/search pages		
	Make sure filtering is useful	High		High			
	Add urgency elements	High		High	cvr		
	Display price info above the fold on product pages	Easy		High	Add to cart, cvr, bounce rate		
	Make sure product descriptions are readable	Easy					
	If large number of products, add reviews	High		High	time on site, cvr		

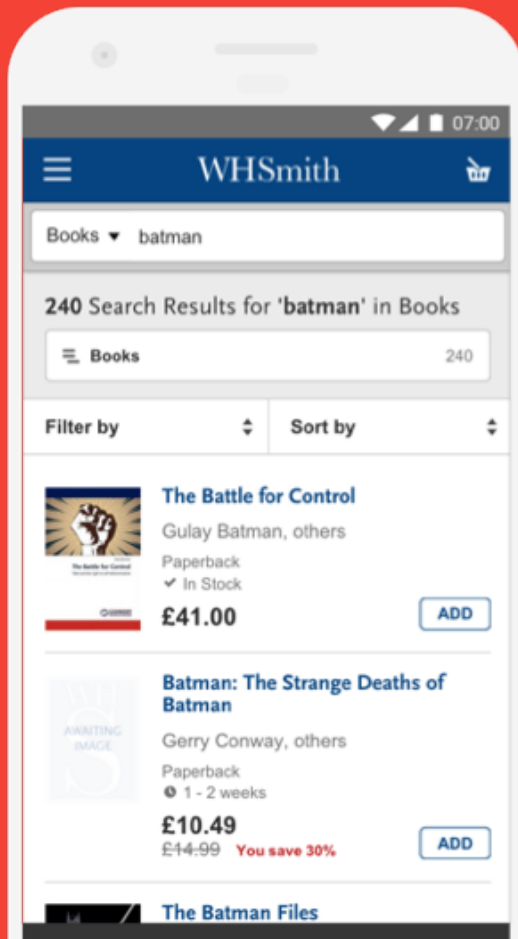


# INCLUDE VALUE PROP AT EVERY STEP OF THE FUNNEL, INCLUDING CATEGORY & PRODUCT PAGES

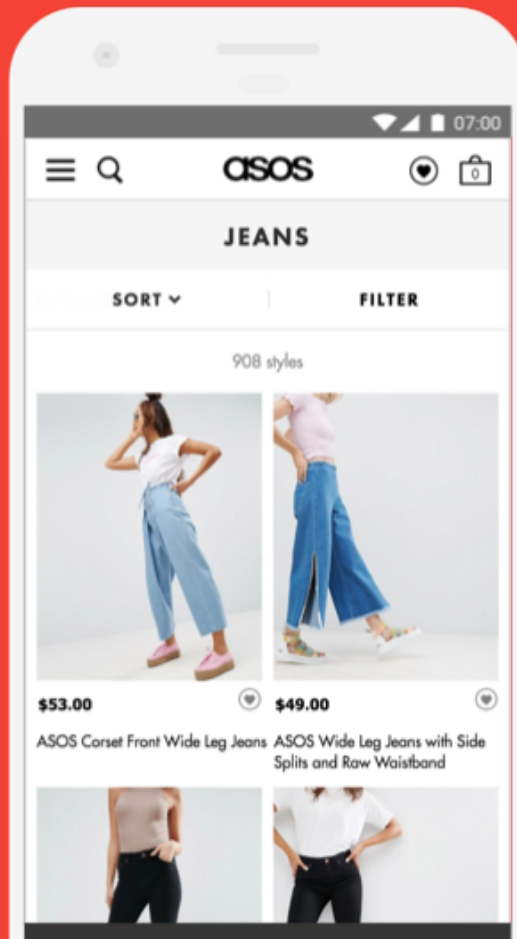


# ENABLE USERS TO EASILY SORT/FILTER FOR PRODUCTS

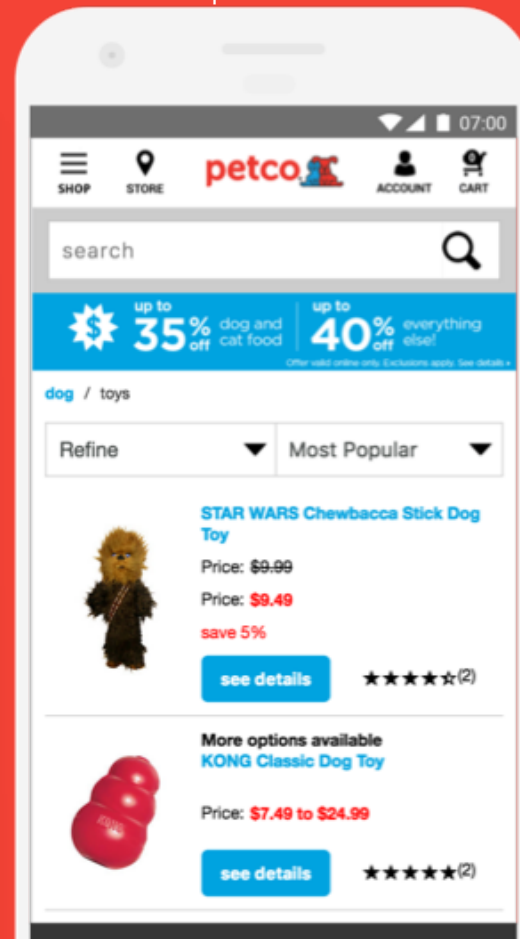
whsmith.com



asos.com

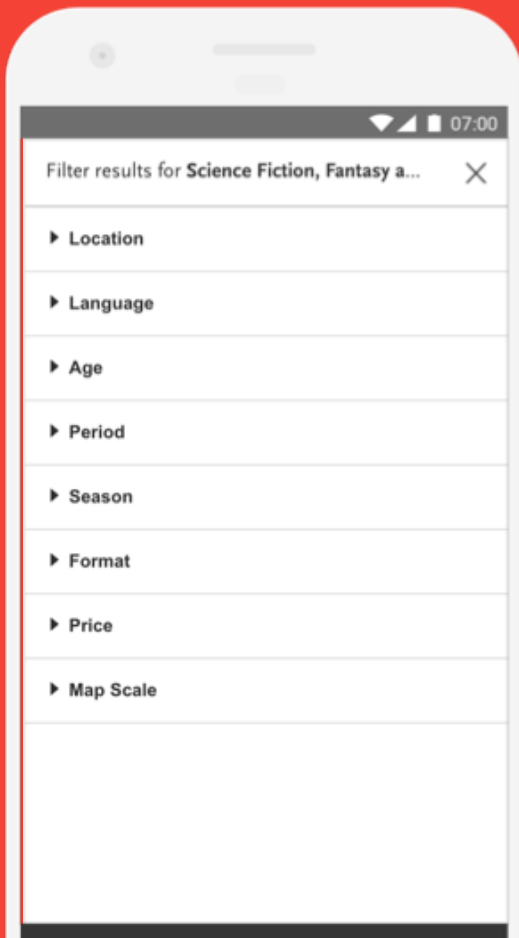


petco.com

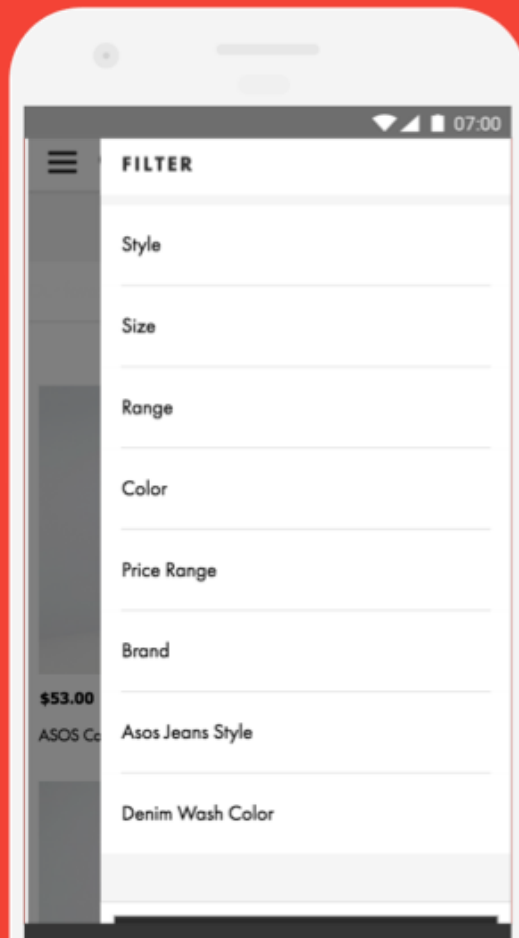


# MAKE SURE FILTERING IS USEFUL

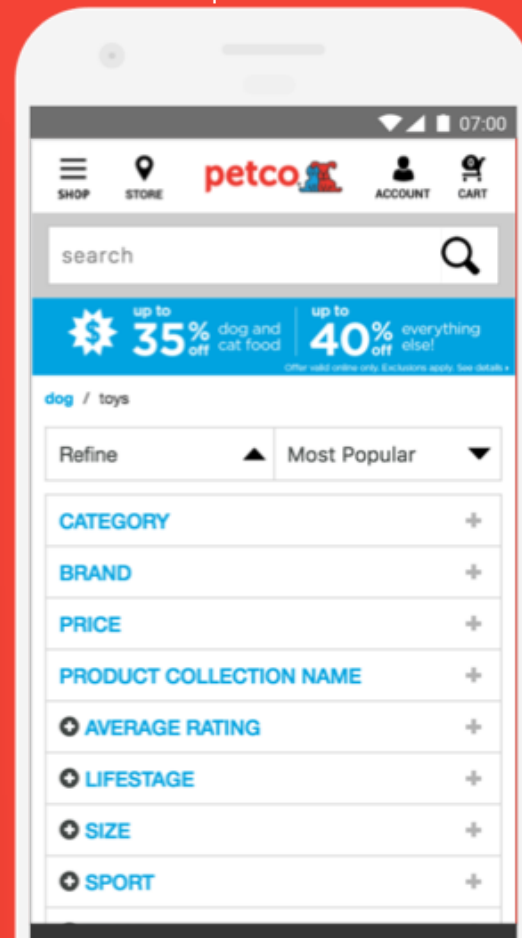
amazon.com



asos.com

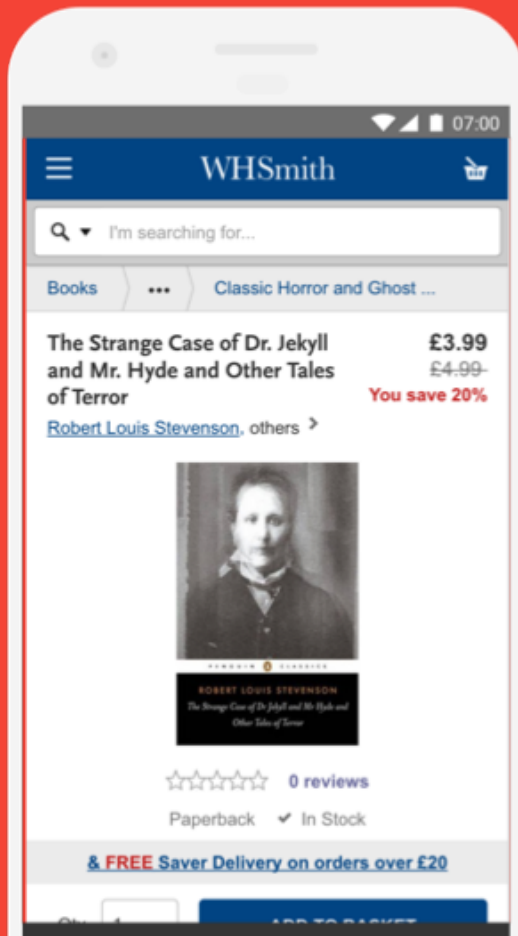


petco.com

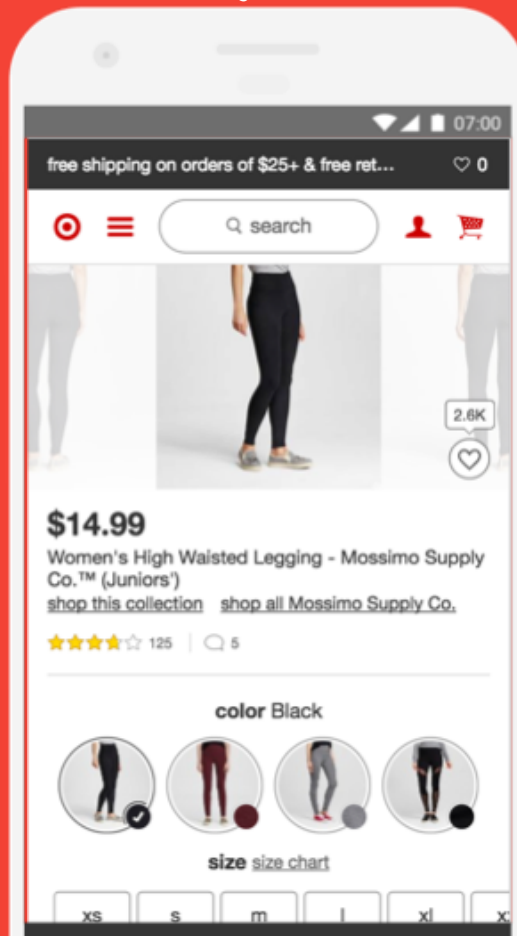


# HAVE PRICE INFO ABOVE THE FOLD ON PRODUCT PAGES

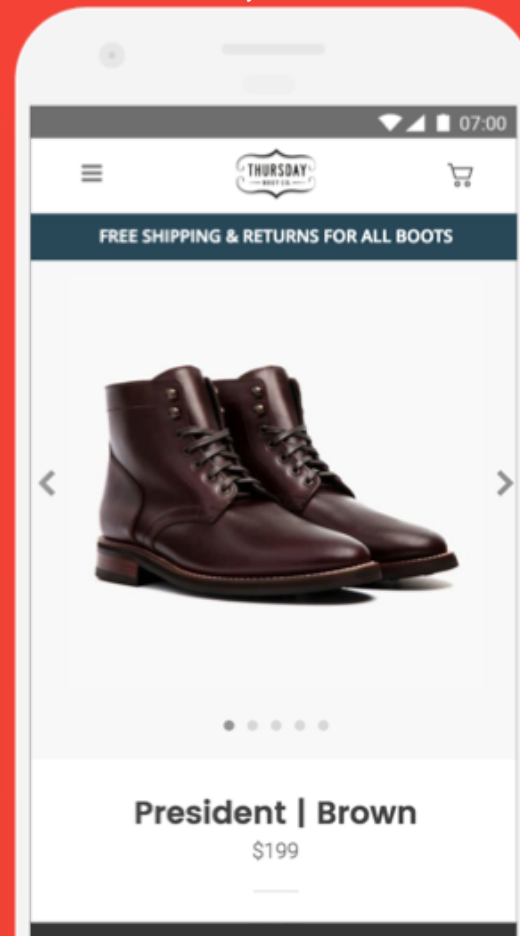
whsmith.com



target.com

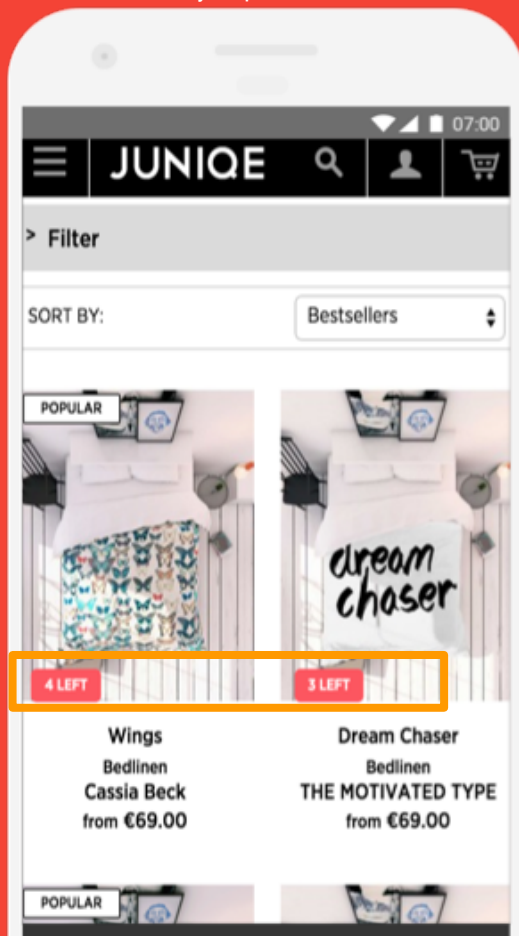


thursdayboots.com

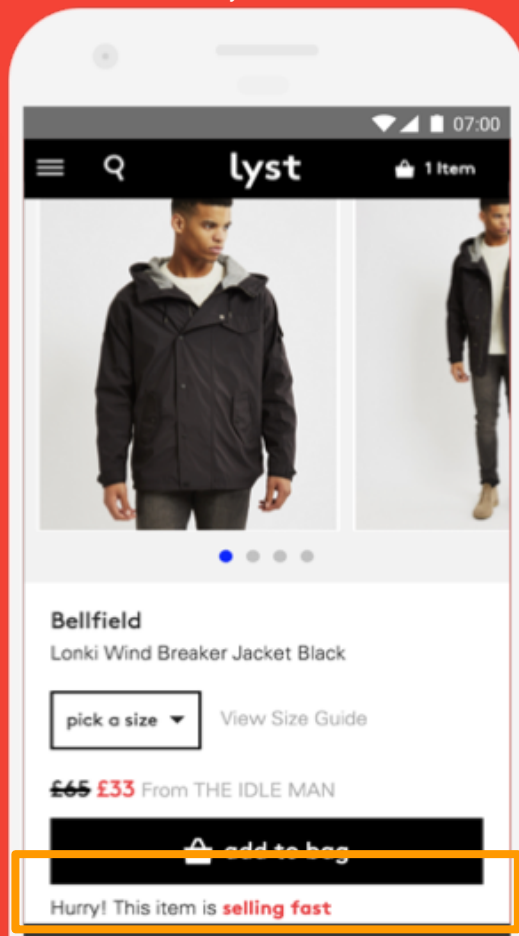


# ADD URGENCY ELEMENTS

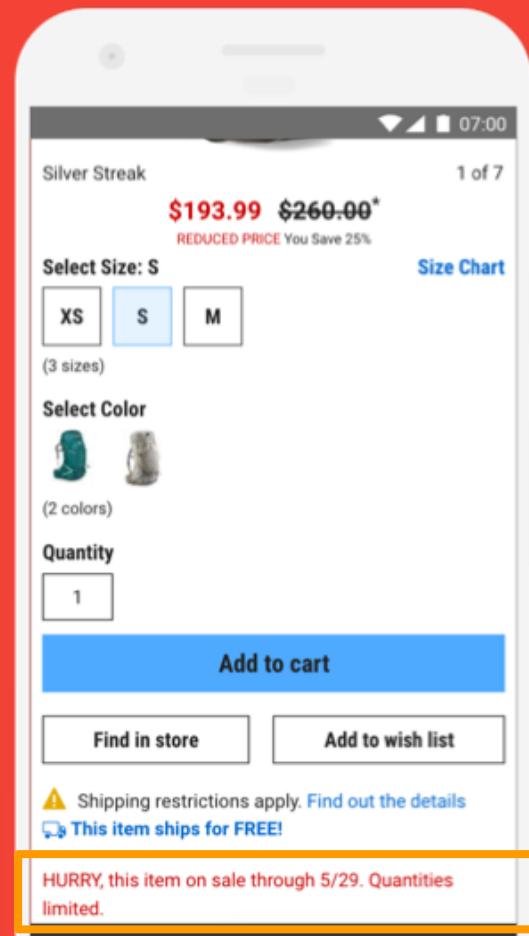
junique.com



lyst.com



rei.com

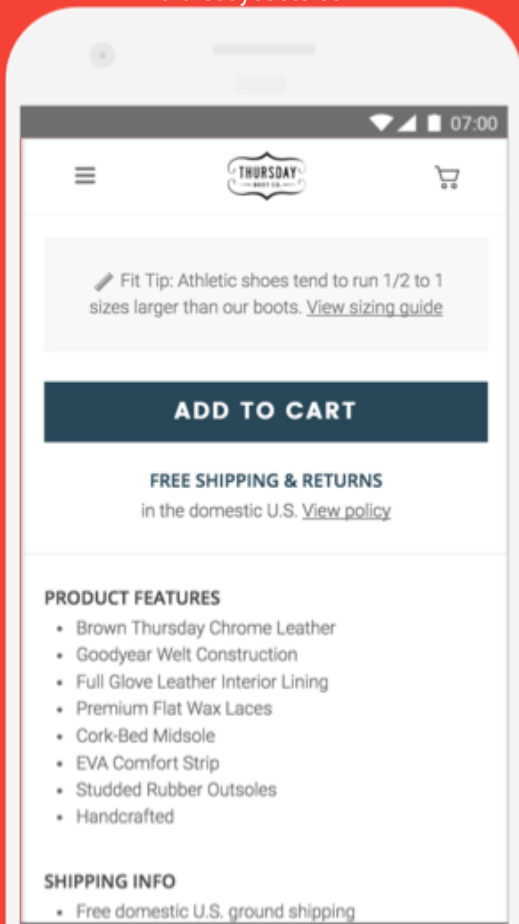


**Urgency** is a powerful **motivator**, if done well.  
There are 3 ways to create urgency:

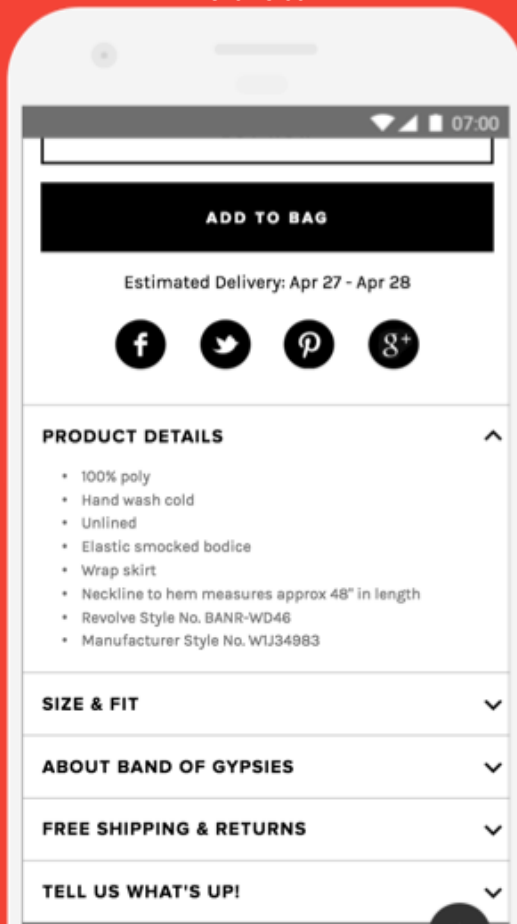
- **Quantity limitations** (Only 3 tickets left at this price)
- **Time limitations** (Discounted tickets until July 1st)
- **Contextual limitations** (Father's Day is coming, get a gift now)

# MAKE SURE PRODUCT DESCRIPTIONS ARE READABLE (use bullets, easy to skim content)

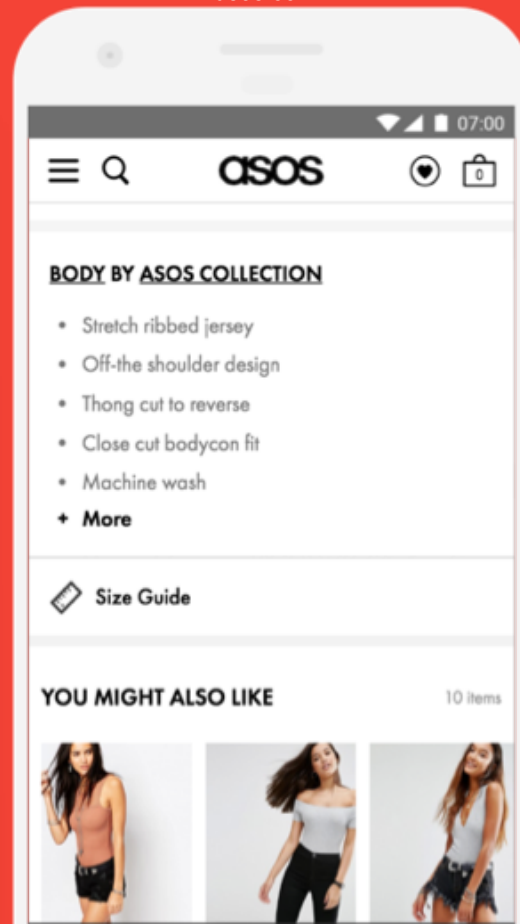
thursdayboots.com



revolve.com

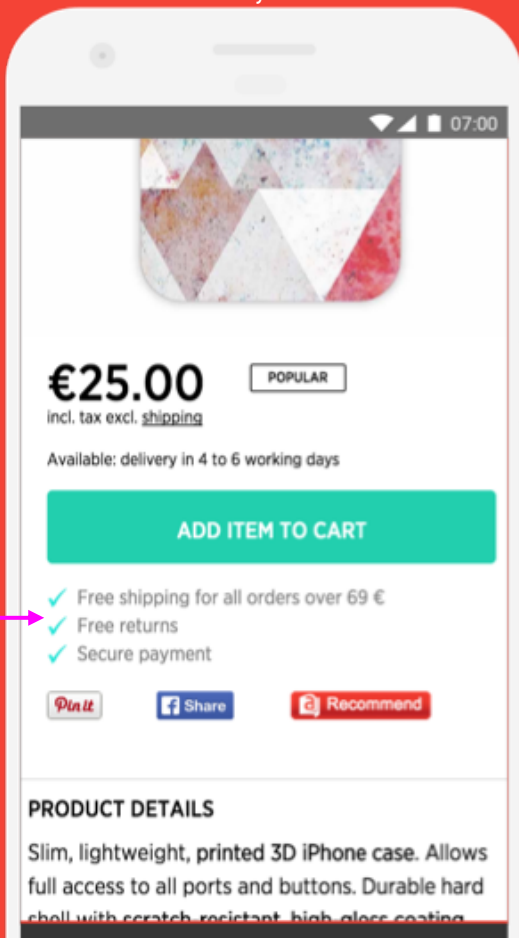


asos.com

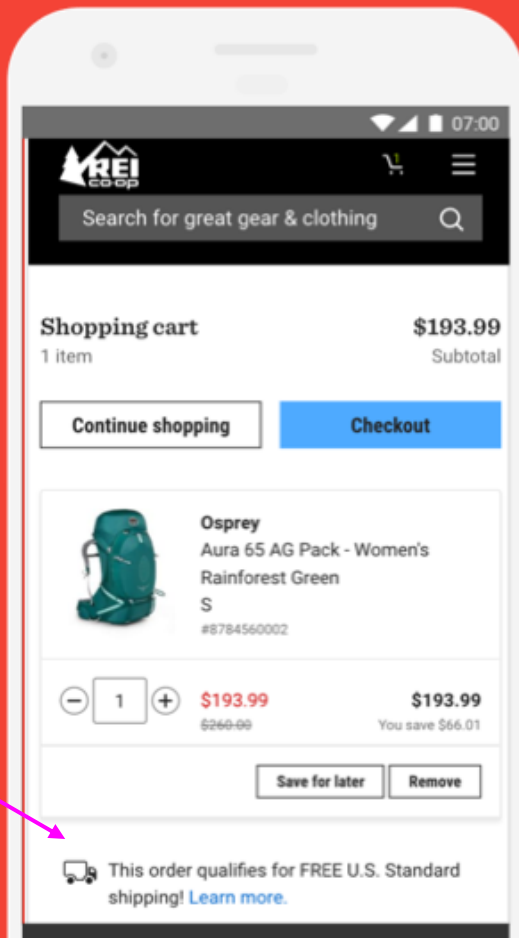


# REITERATE VALUE PROP AT CONVERSION POINT

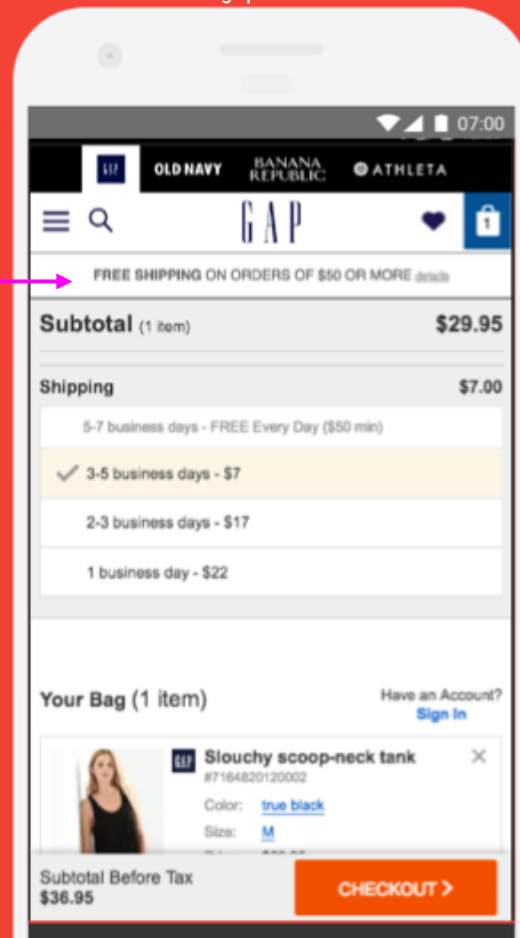
society6.com



rei.com



gap.com



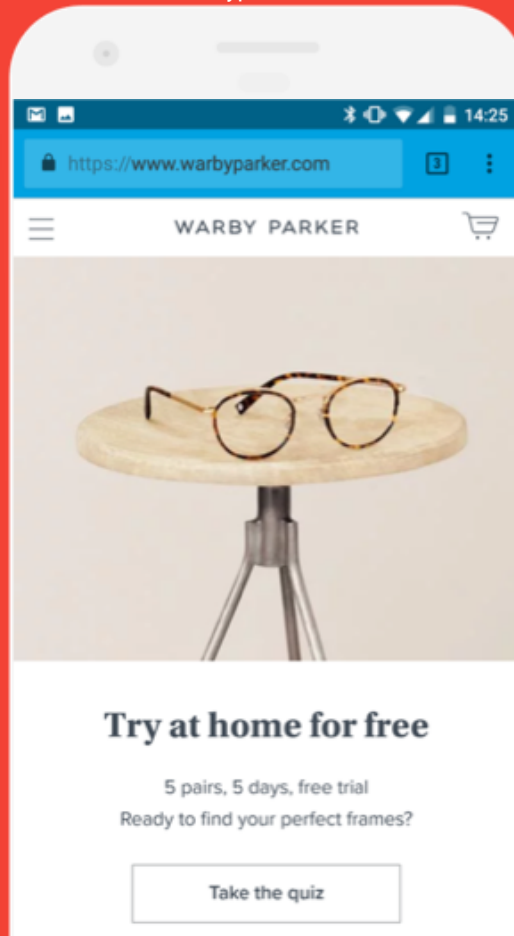


## Bonus: MATCH BROWSER ELEMENTS TO YOUR BRAND (INFO HOW, RESEARCH)

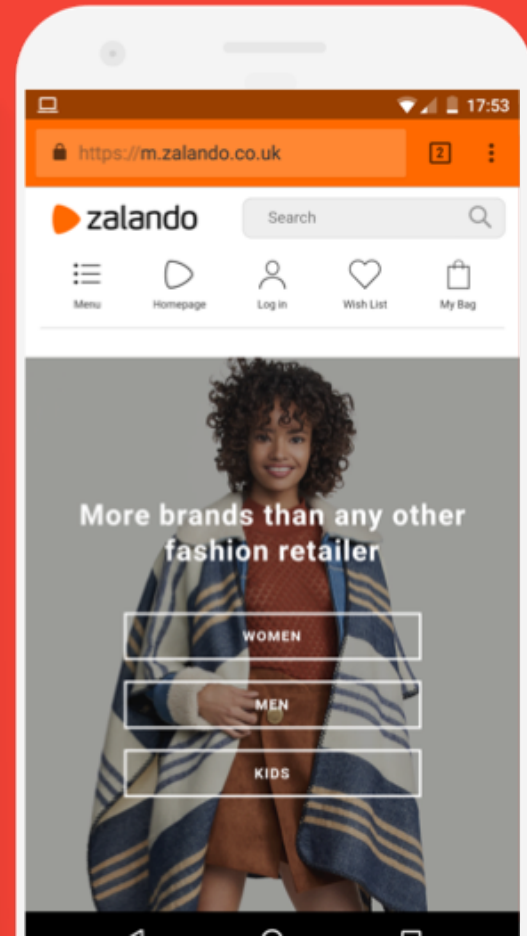
wayfair.co.uk



warbyparker.com



zalando.co.uk



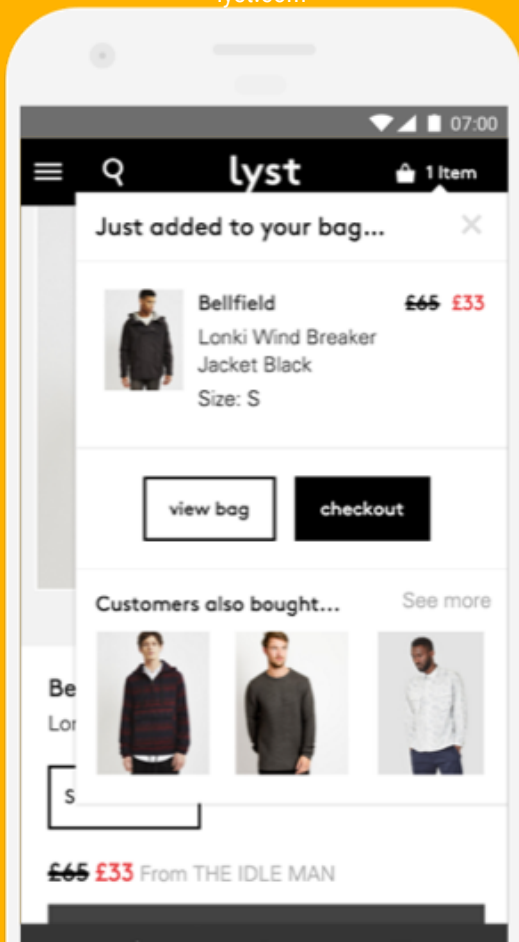


CONVERSION CHECKLIST

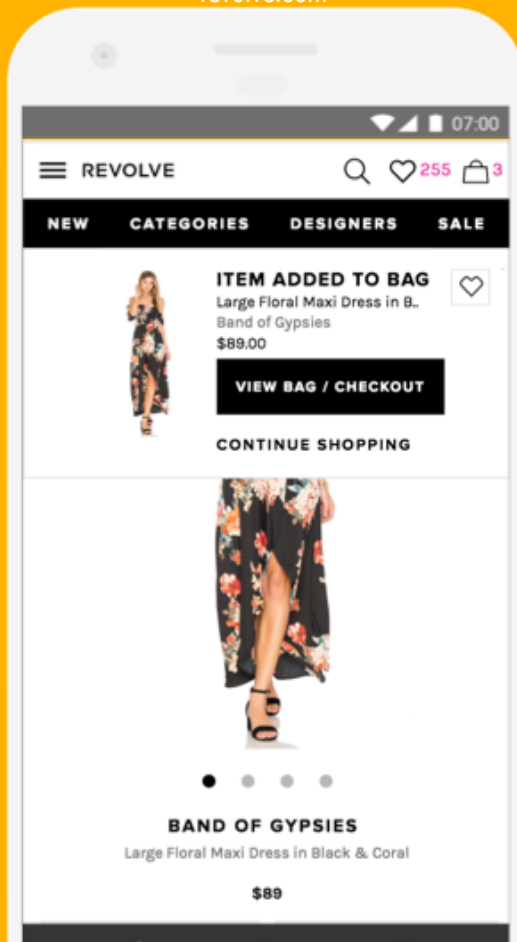
1. HOME/LANDING PAGE		2. MENU & NAVIGATION		3. SEARCH		4. CATEGORY/PRODUCT		5. CONVERSION		6. FORM OPTIMIZATION	
SECTION	Conversion				Ease of implementation		Impact		Key Metric		
KEY SUGGESTION	Don't redirect into checkout after adding to cart				Medium		High		pages/visit, cart size, AOV		
	Re-iterate value prop (typically free shipping) in the cart				Easy		Medium		CVR, exit rate		
	Allow users to update their carts (change quantity with steppers, remove)				Medium		Low		CVR, exit rate		
	Allow users to continue on another device by emailing or saving for later				High		High		cross device conversions, track as micro-conversion		
	Limit your exit points during the conversion flow				Medium		High		CVR, exit rate		
	Allow checkout as guest				Medium		High		CVR, exit rate		
	Let users sign up/sign in with social				Medium		Medium		CVR, exit rate		
	Add value prop around why someone should create an account				Easy		Medium		Signup rate, exit rate		
	Use pagination or a progress bar if more than 2 steps in conversion flow				Medium		High		CVR, exit rate		
	Have descriptive CTAs				Easy		Low		CVR, exit rate		

# DON'T REDIRECT AFTER ADDING TO CART

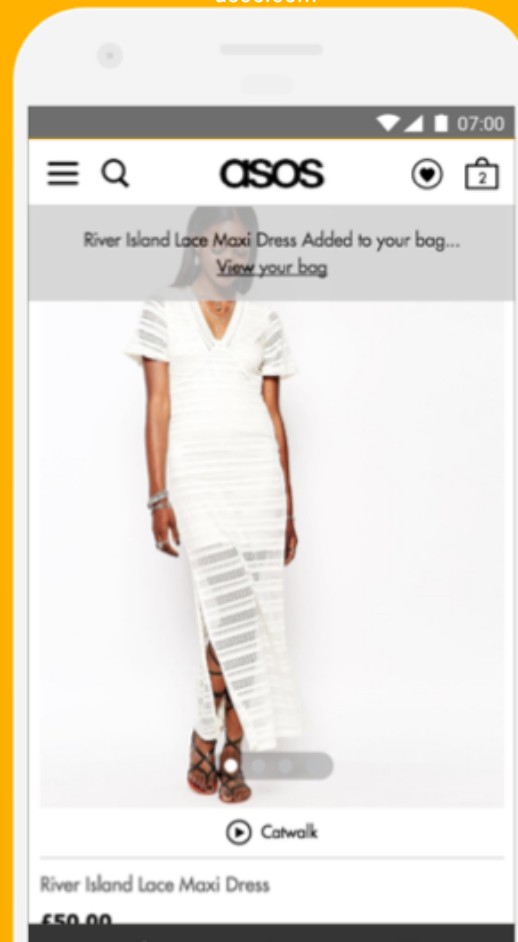
lyst.com



revolve.com

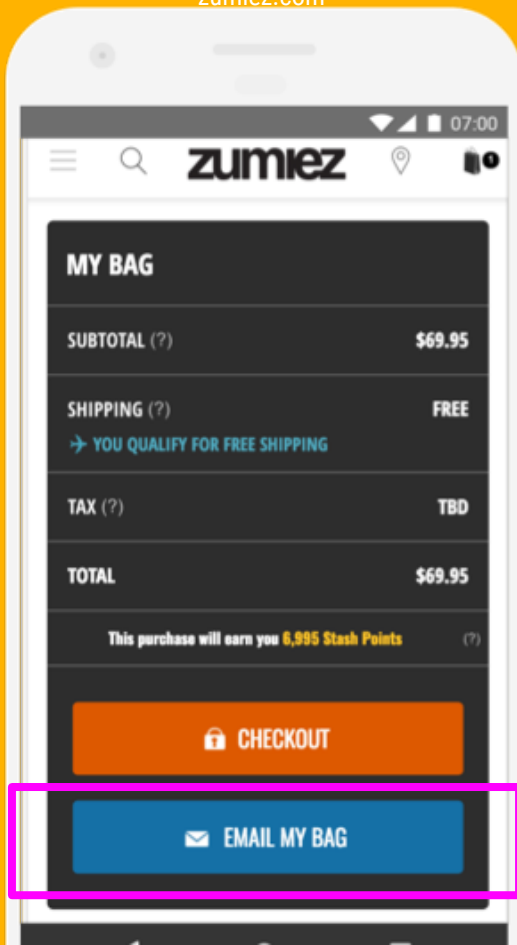


asos.com



# FACILITATE X-DEVICE MOVEMENT IN THE CART

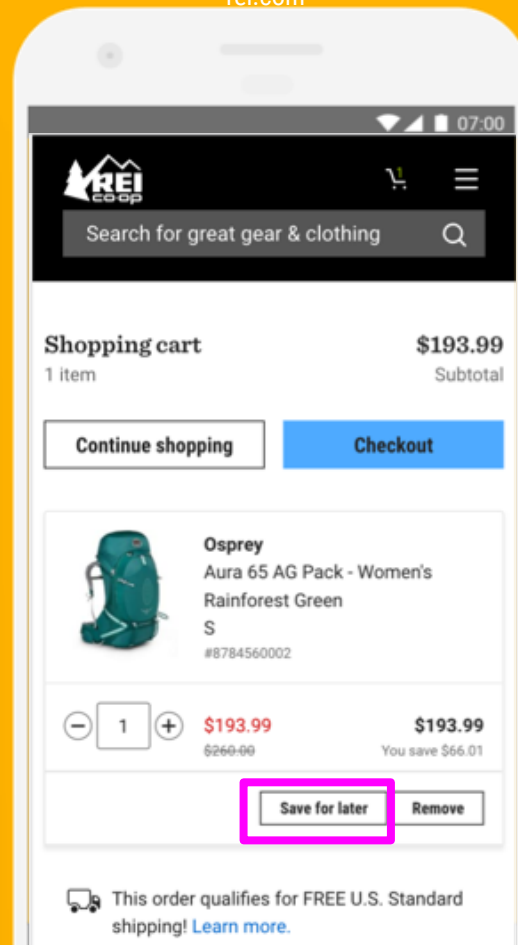
zumiez.com



ao.com

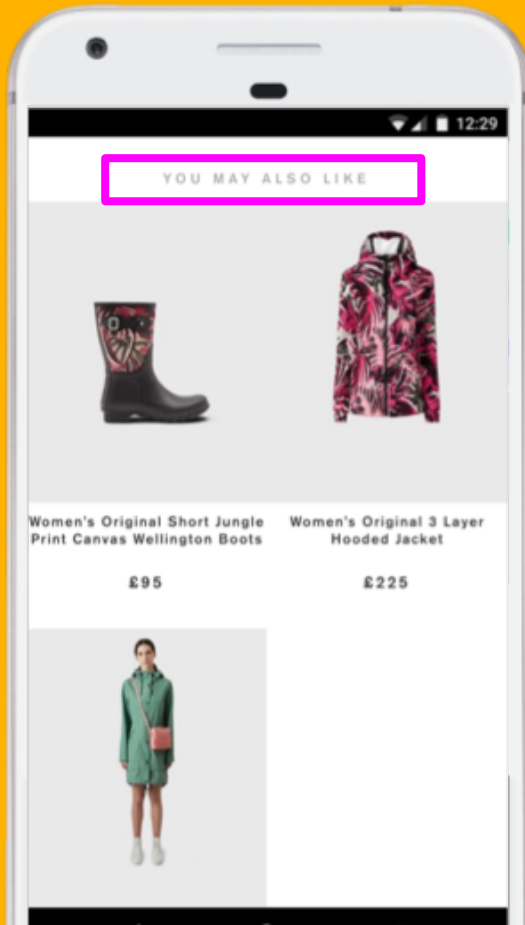


rei.com

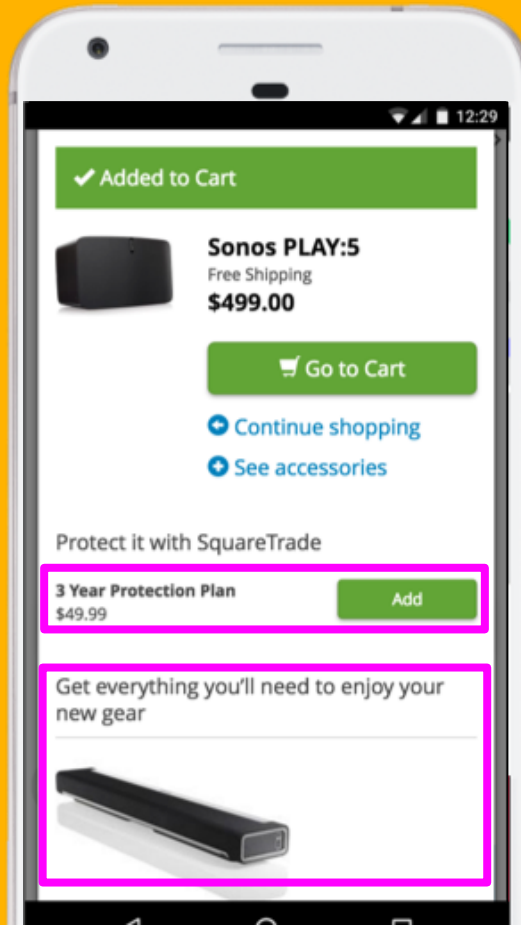


## Bonus: UPSELL IN CART

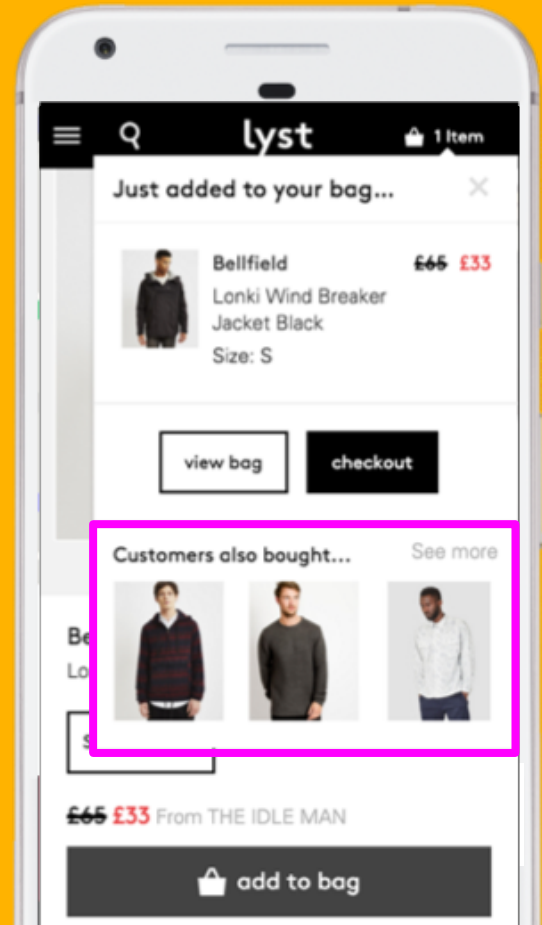
hunterboots.com



ao.com

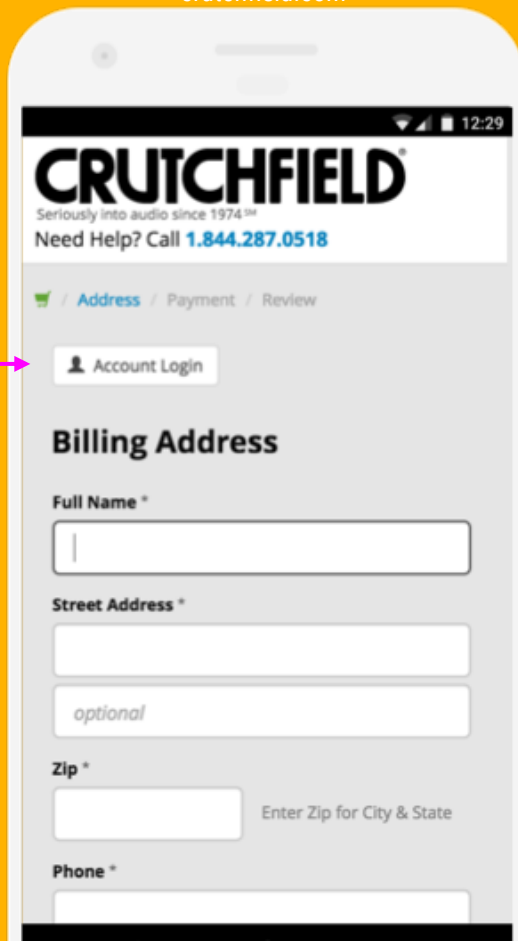


lyst.com



# ALLOW CHECKOUT AS GUEST

crutchfield.com



Crutchfield mobile app checkout screen. The screen shows the Crutchfield logo, a progress bar with 'Address' selected, and an 'Account Login' button. Below is a 'Billing Address' section with input fields for 'Full Name', 'Street Address', 'Zip', and 'Phone'. A pink arrow points to the 'Account Login' button.

CRUTCHFIELD  
Seriously into audio since 1974™  
Need Help? Call 1.844.287.0518

Address / Payment / Review

Account Login

**Billing Address**

Full Name \*

Street Address \*

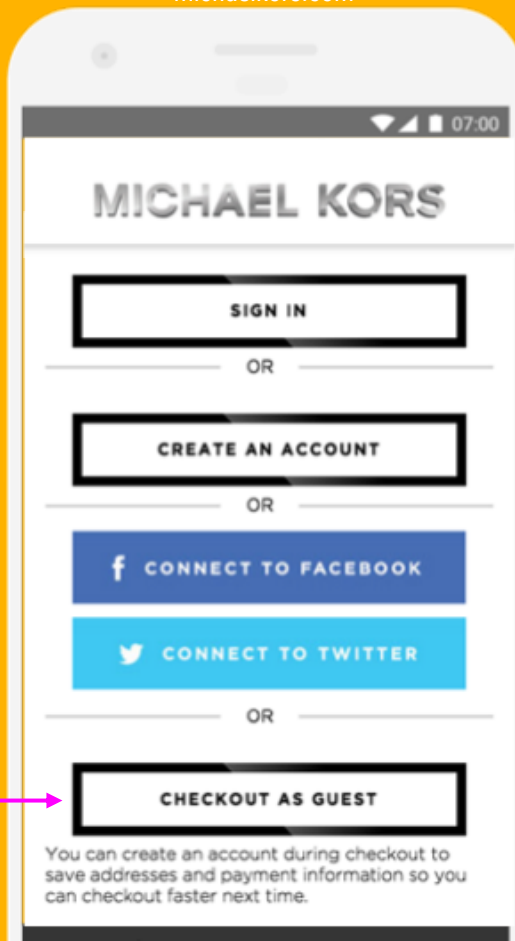
optional

Zip \*

Enter Zip for City & State

Phone \*

michaelkors.com



Michael Kors mobile app checkout screen. The screen shows the Michael Kors logo and three buttons: 'SIGN IN', 'CREATE AN ACCOUNT', and 'CHECKOUT AS GUEST'. Below the 'CHECKOUT AS GUEST' button is a note about creating an account during checkout. A pink arrow points to the 'CHECKOUT AS GUEST' button.

MICHAEL KORS

SIGN IN

OR

CREATE AN ACCOUNT

OR

CONNECT TO FACEBOOK

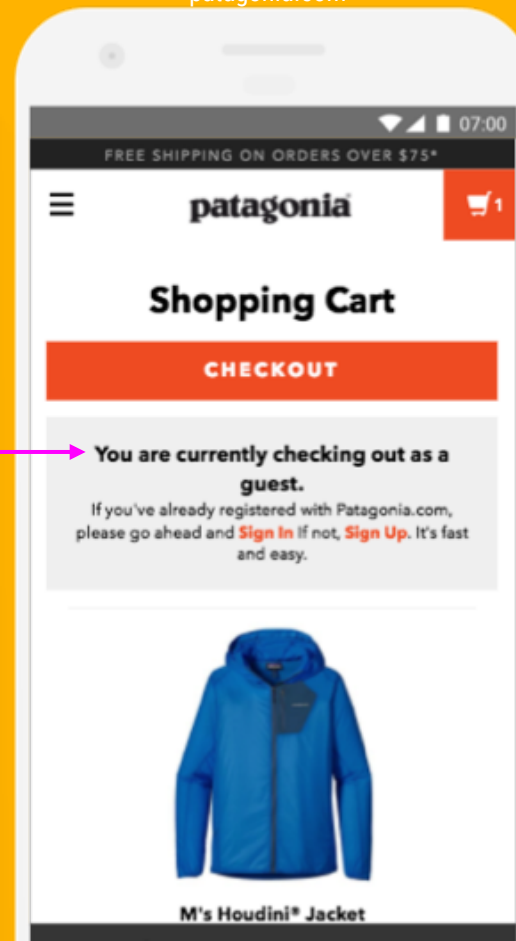
CONNECT TO TWITTER

OR

**CHECKOUT AS GUEST**

You can create an account during checkout to save addresses and payment information so you can checkout faster next time.

patagonia.com



Patagonia mobile app checkout screen. The screen shows the Patagonia logo, a shopping cart icon with '1' item, and a 'CHECKOUT' button. Below the checkout button is a message: 'You are currently checking out as a guest. If you've already registered with Patagonia.com, please go ahead and Sign In if not, Sign Up. It's fast and easy.' Below this is an image of a blue jacket labeled 'M's Houdini® Jacket'.

FREE SHIPPING ON ORDERS OVER \$75\*

patagonia

Shopping Cart

CHECKOUT

You are currently checking out as a guest.  
If you've already registered with Patagonia.com, please go ahead and Sign In if not, Sign Up. It's fast and easy.

M's Houdini® Jacket

# ADD VALUE PROP AROUND WHY CREATE AN ACCOUNT

mango.com

The Mango.com mobile app interface shows a login screen with a 'Returning customer' section containing email and password fields, a 'Keep me signed in' checkbox, and a 'Sign in' button. Below this is a 'New customer' section with a message: 'Enter your e-mail address to continue with your purchase. If you wish, you can create an account later.' and an email input field. At the bottom, there is a checkbox for 'I wish to receive the newsletter'.

petco.com

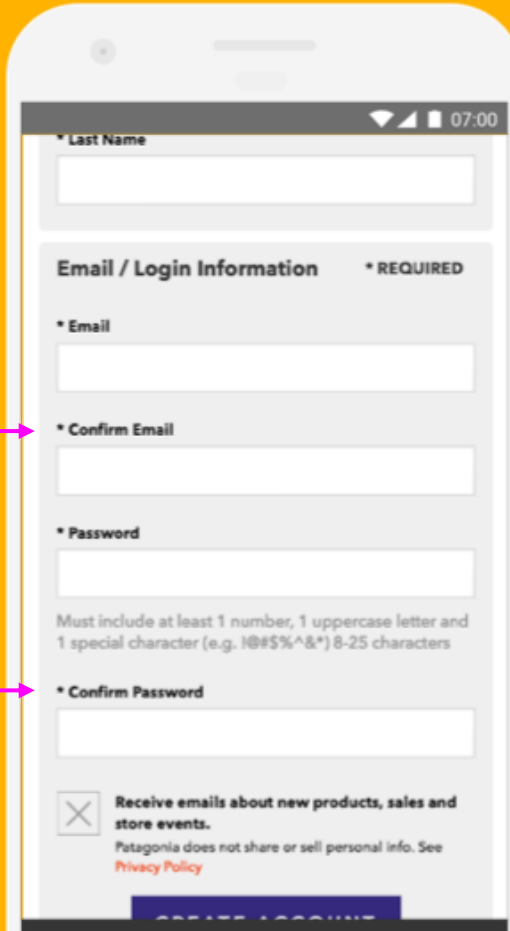
The Petco.com mobile app interface shows a login screen with a 'Remember Me' checkbox, an 'I'm not a robot' checkbox with a reCAPTCHA icon, and a 'sign in' button. Below this is a 'Checkout as Guest' section with the text: 'Save time now and proceed directly to checkout. An account is not required to complete your purchase. However, you can enter a password on the final checkout page to complete your account registration.' and a 'checkout as guest' button. At the bottom, there is a 'sign up for email' button.

novica.com

The Novica.com mobile app interface shows an account creation screen with a 'Verify Password' field and a 'CREATE ACCOUNT' button. Below this is a 'Have an account? SIGN IN HERE' link. Further down is an 'ACCOUNT BENEFITS' section with the heading 'Enjoy these perks with your free account!' and a list of benefits: 'Faster checkout', 'Full rewards program benefits', 'Earn credits with every purchase', 'Manage your wishlists', 'Curate your own collections', 'Make microcredit loans', and 'Spread happiness around the world'. A blue upward arrow icon is at the bottom right.



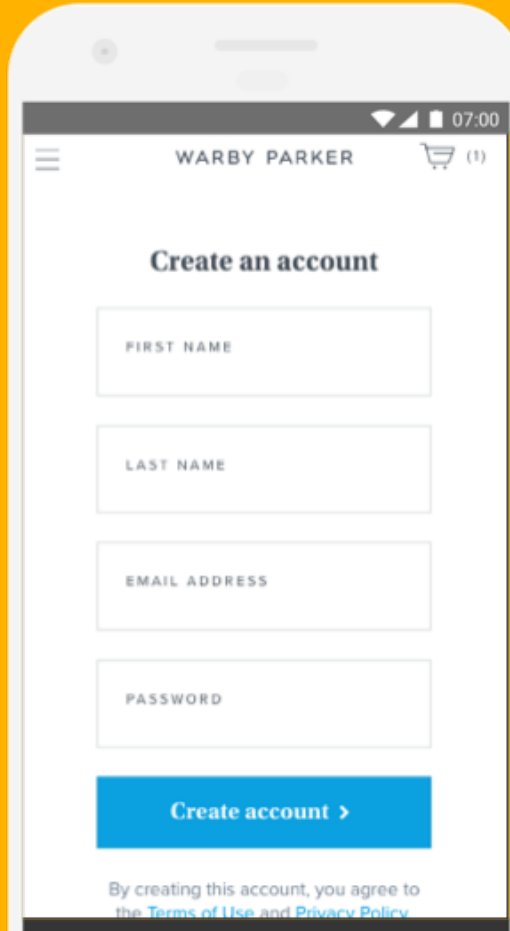
## Additional: DON'T MAKE USERS CONFIRM ACCOUNT INFO



Mobile app interface for account creation (Patagonia). The form includes:

- \* Last Name
- Email / Login Information \* REQUIRED
  - \* Email
  - \* Confirm Email (highlighted with a pink arrow)
  - \* Password
  - Must include at least 1 number, 1 uppercase letter and 1 special character (e.g. !@#\$%^&\*) 8-25 characters
  - \* Confirm Password (highlighted with a pink arrow)
- ☐ Receive emails about new products, sales and store events. Patagonia does not share or sell personal info. See [Privacy Policy](#)
- [CREATE ACCOUNT](#)

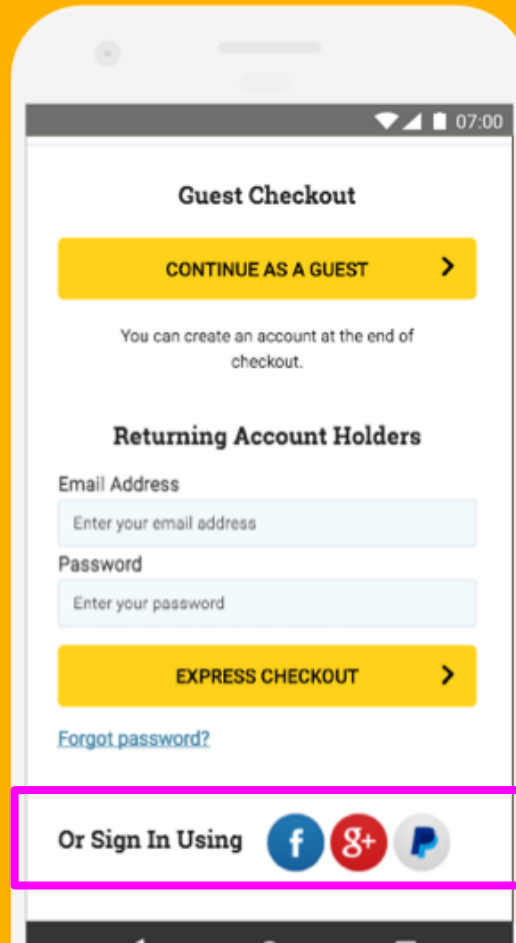
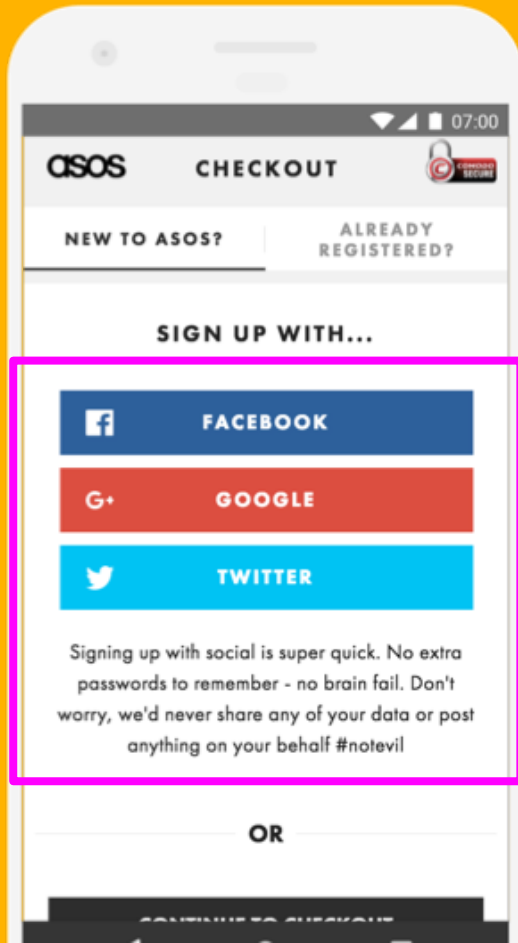
VS.



Mobile app interface for account creation (Warby Parker). The form includes:

- WARBY PARKER
- Shopping cart icon (1)
- Create an account
- FIRST NAME
- LAST NAME
- EMAIL ADDRESS
- PASSWORD
- [Create account >](#)
- By creating this account, you agree to the [Terms of Use](#) and [Privacy Policy](#)

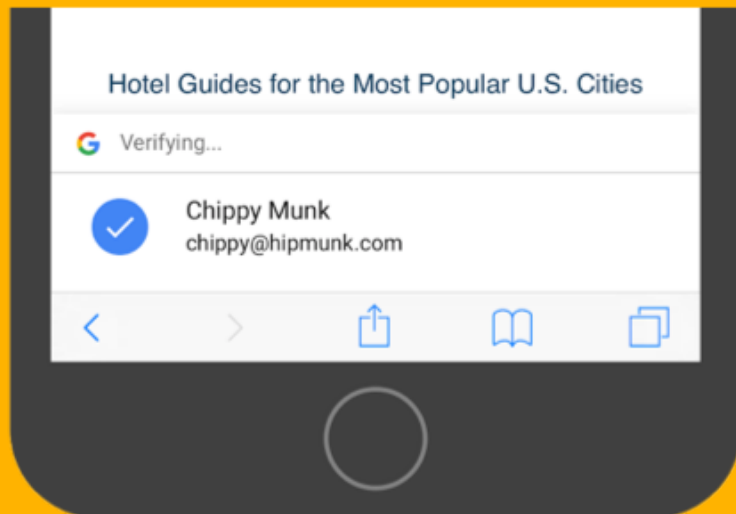
## LET USERS SIGN UP WITH SOCIAL ACCOUNTS



92% of users give up if they don't remember a username or password.

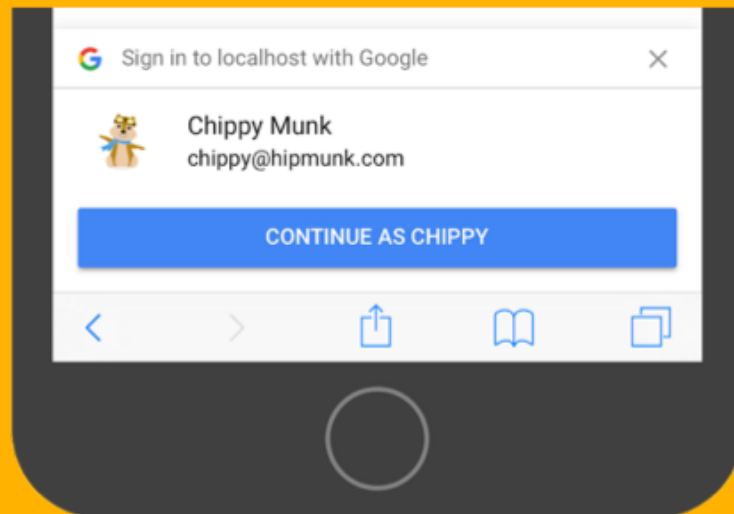
# CONSIDER INTEGRATING GOOGLE IDENTITY ONE TAP SIGN UP (2-4x higher sign-up rates)

Sign in users automatically when they return to your site on any device or browser, even after their session expires. [More info](#)



Automatic sign-in

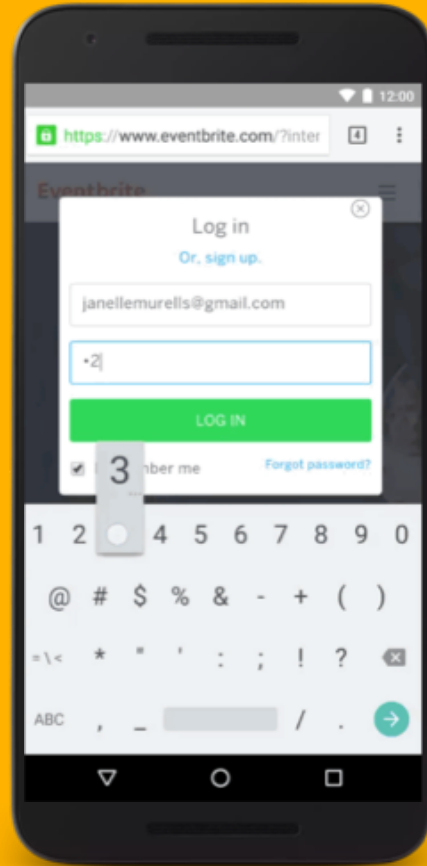
Sign up new users with just one tap, without interrupting them with a sign-up screen. Users get a secure, token-based, passwordless account on your site, protected by their Google Account. [More info](#).



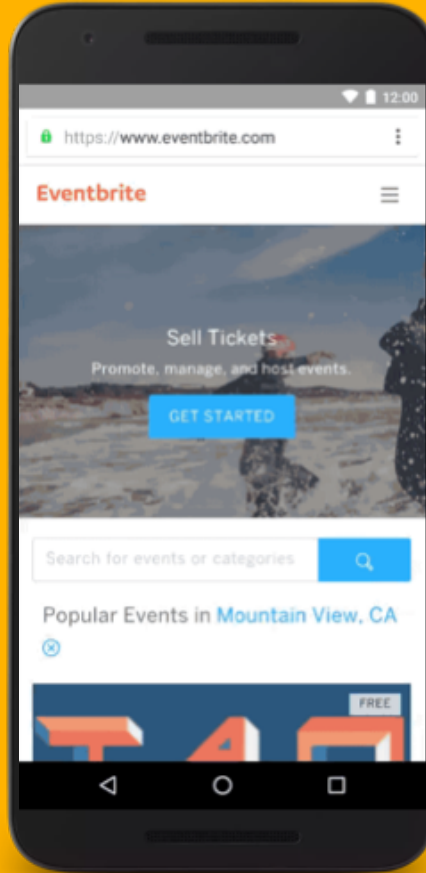
One tap sign-up

# Bonus: USE CREDENTIAL MANAGER API (aka SMARTLOCK) TO REDUCE FAILED SIGN IN LATER

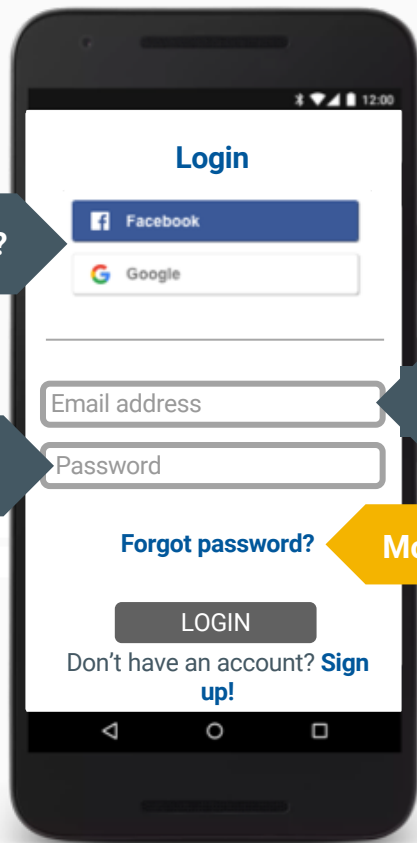
Detect & Save



Autofill next time



# USE CREDENTIAL MANAGER API (aka SMARTLOCK) TO REDUCE FAILED SIGN IN LATER



Did I use that?

\$%&\$"%\$?!

Yes, but which one?

Most likely!

## Why:

Most popular password (2015): **12345**

2nd most popular: **password**

3rd most popular: **123456**

**8 billion** assisted sign ins per month

Works across devices

## What:

- Saves password to browser
- Auto-signs in returning users

## Google Developers implementation docs:

- [Streamlining the sign-in flow using credential manager API](#)
- [Integration guide](#)

## Research:

[goo.gl/9FwBh4](https://goo.gl/9FwBh4)

# LIMIT EXIT POINTS DURING CONVERSION FLOW

(only allow uses to go to homepage, back to cart or contact support... NO menu)

junique.com

07:00

**JUNIQUE**

Address > Payment > Order review

**ADDRESS INFORMATION**

**Billing address**

Title

First name \*

Last name \*

Address \*

Address line 2 / Company

Zip/Postal Code \*

petco.com

07:00

**petco**

1. Shipping Address 2 3 4

**Shipping Address**

\* First Name

\* Last Name

\* Phone

\* Email

☒ Yes, I would like to receive updates from Petco & partners.

[Privacy Policy](#)

\* Address Line 1


ao.com

07:00

**ao.com**


Delivery > Details > Payment

**Delivery Method**

 **Click & Collect**

- ✓ Collect from over 5,800 local stores, including Spar, Lonsis and Costcutter
- ✓ You'll receive a text when your parcel's ready, with 10 days to collect
- ✓ Express and free delivery available

[Choose Click & Collect](#)

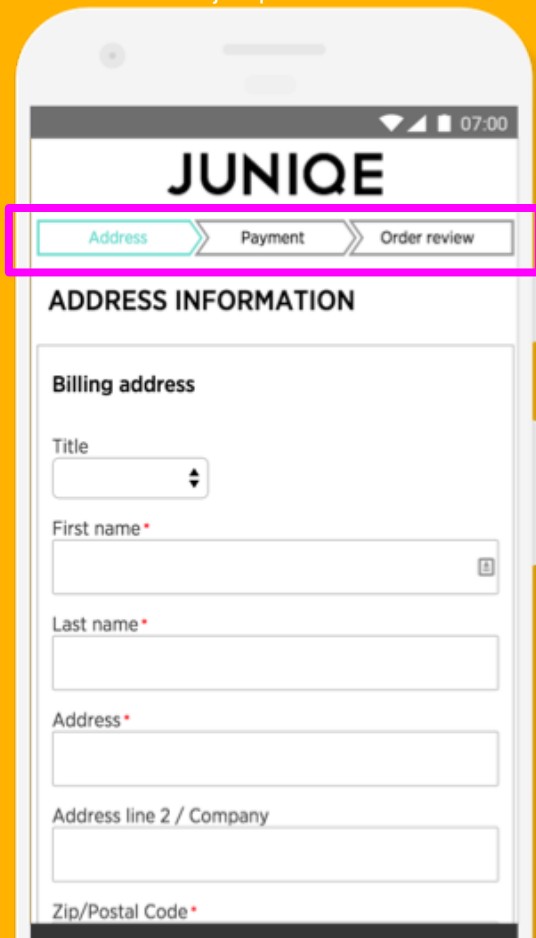
 **Home Delivery**

- ✓ Delivered to your door, on a day that suits you
- ✓ Delivery from 7am to 7pm, we'll text you a timeslot on the day
- ✓ Next day and free delivery available

[Choose Home Delivery](#)

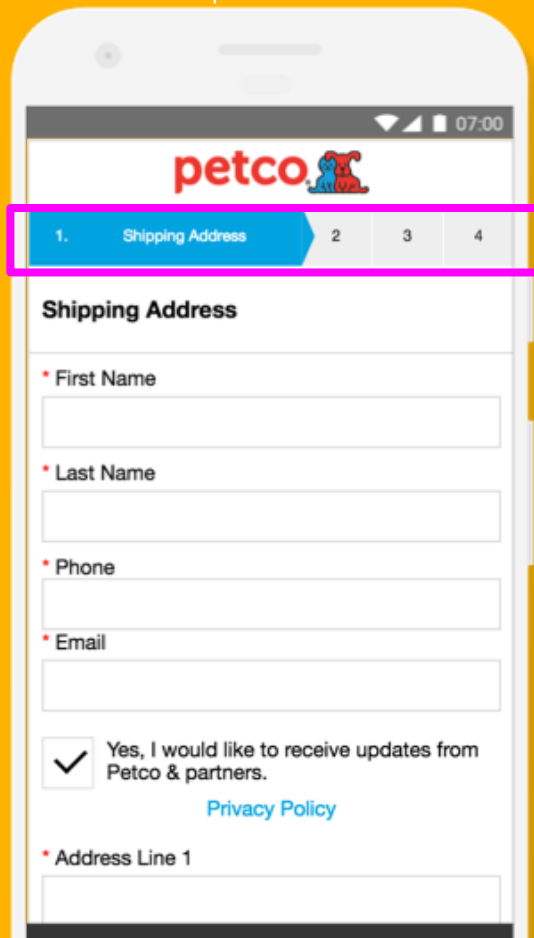
# USE PAGINATION IF MORE THAN TWO STEPS IN CONVERSION FLOW

junique.com



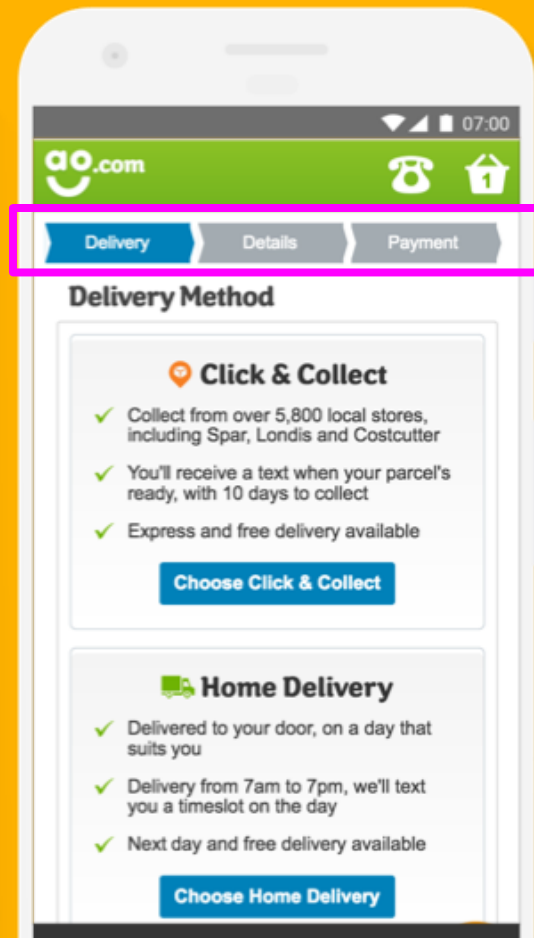
Junique mobile app checkout screen. The navigation bar at the top shows three steps: Address, Payment, and Order review. The 'Address' step is highlighted with a pink box. Below the navigation bar, the screen displays 'ADDRESS INFORMATION' and a form for 'Billing address' with fields for Title, First name, Last name, Address, Address line 2 / Company, and Zip/Postal Code.

petco.com



Petco mobile app checkout screen. The navigation bar at the top shows four steps: 1. Shipping Address, 2, 3, and 4. The '1. Shipping Address' step is highlighted with a pink box. Below the navigation bar, the screen displays 'Shipping Address' and a form with fields for First Name, Last Name, Phone, Email, and Address Line 1. There is also a checkbox for receiving updates from Petco & partners and a link to the Privacy Policy.

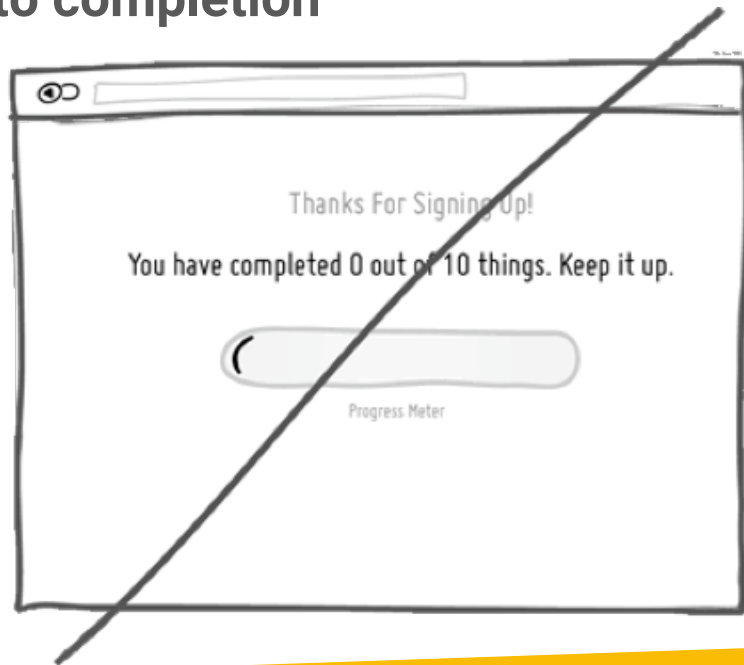
ao.com



ao.com mobile app checkout screen. The navigation bar at the top shows three steps: Delivery, Details, and Payment. The 'Delivery' step is highlighted with a pink box. Below the navigation bar, the screen displays 'Delivery Method' and two options: 'Click & Collect' and 'Home Delivery'. Each option has a list of benefits and a 'Choose' button.

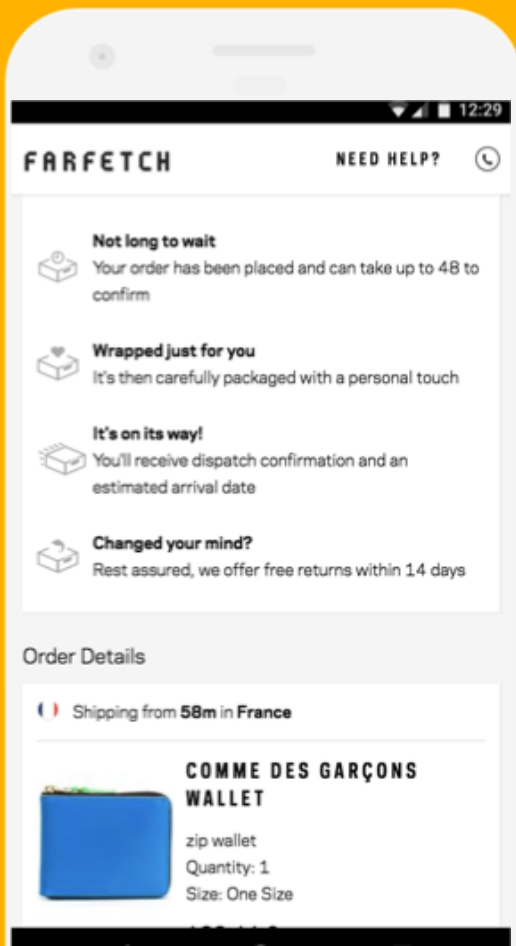
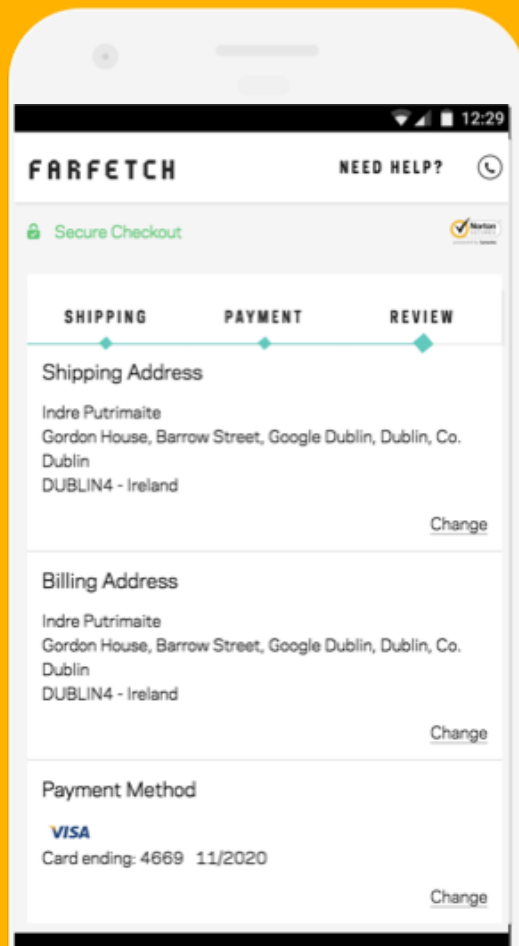
# Try Upfront Progress instead of starting at zero

**There is more motivation for getting things done the closer we are to completion**





SHOW SUMMARY BEFORE THE CHECKOUT. ONCE CONFIRMED, SHOW WHAT HAPPENS NEXT.



# Form Optimization

# Creating frictionless experiences across the funnel (RETAIL)

1. HOME/LANDING PAGE	2. MENU & NAVIGATION	3. SEARCH	4. CATEGORY/PRODUCT	5. CONVERSION	6. FORM OPTIMIZATION
----------------------	----------------------	-----------	---------------------	---------------	----------------------

SECTION	Form Optimization		Ease of implementation	Impact	Key Metric
KEY SUGGESTION	Use inline validation & autofill		Medium	High	Exit rate
	Reduce number of fields	<ul style="list-style-type: none"><li>Remove optional fields</li><li>Use full name instead of first/last</li><li>Hide company and address line 2</li><li>Check billing as shipping by default</li></ul>	Medium	High	Exit rate
	Don't use dropdowns for inputs with < 4 options, instead opt for buttons		Easy	Medium	Exit rate
	Use steppers, sliders, or open field input for numerical entry rather than large dropdowns		Easy	Medium	Exit rate
	Use correct keypads		Easy	Medium	Exit rate

Typing on mobile **is hard**

me\_every\_time@|

# USE INLINE VALIDATION & AUTOFILL

**In-line validation**

Payment details

Hurry, that's the cheapest room at DoubleTree by Hilton Hotel London - Westminster! Book it now.

First name

John ✓

Last name

Meyer ✓

Card number

1111

Your credit card number appears to be incorrect. Please check it and try again.

Card type

Card Type ▾

Security code

**In-line validation**

asos

Email address

Thaselbeck@google.com ✓

We'll send your order confirmation here

First name

We need your first name – it's nicer that way

Last name

Haselbeck ✓

Password

Must be 6 or more characters and contain at least 1 number

Date of birth

**Autofill**

First name

d

Last name

Address

Apt

ore St Claire 920 Hamilton Ave ^ v X

"C" Can Come

q w e r t y u i o p

a s d f g h j k l

⬆ z x c v b n m ⬆

123 😊 🗣 space Go

# REDUCE THE NUMBER OF FIELDS

## Use full name

07:00

< Back

Full name

Address line 1

Address line 2

City

State/Province/Region

ZIP

Phone number

United States

Use this address

Not Claire ...?  
[Sign Out](#)

## Use Google Places Autocomplete API ([link](#))

07:00

THREDUP

1. Shipping Info

First Name

Claire

Last Name

Illmer

Street Address

534 DIVISADERO ST

534 Divisadero Street, San Francisco, CA, United States

534 Divisadero Street Fresno, CA, United States

534 Divisadero Street Mendota, CA, United States

534 Divisadero Street Pacific Grove, CA, United States

534 Divisadero Street Visalia, CA, United States

powered by Google

Shipping options (estimated)

Standard Shipping (3-8 business days)	\$5.99
Expedited Shipping (1-3 business days)	\$11.99

## Check billing as shipping by default

07:00

Zip Code \*

Phone \*

Email \*

☒ Shipping same as billing address

ENTER PAYMENT INFO

TOP OF PAGE

FOLLOW US

[Twitter](#) [Facebook](#) [Pinterest](#) [Google+](#)

GREATBIGCANVAS™

# REDUCE NUMBER OF CHECKOUT FIELDS

A mobile app checkout form with the following fields and elements:

- < Back
- Full name
- Address line 1
- Address line 2
- City
- State/Province/Region
- ZIP
- Phone number
- United States (dropdown menu)
- Use this address (button)
- Not Claire...? (link)

**27%** of users abandon orders due to a “too long / complicated checkout process”.

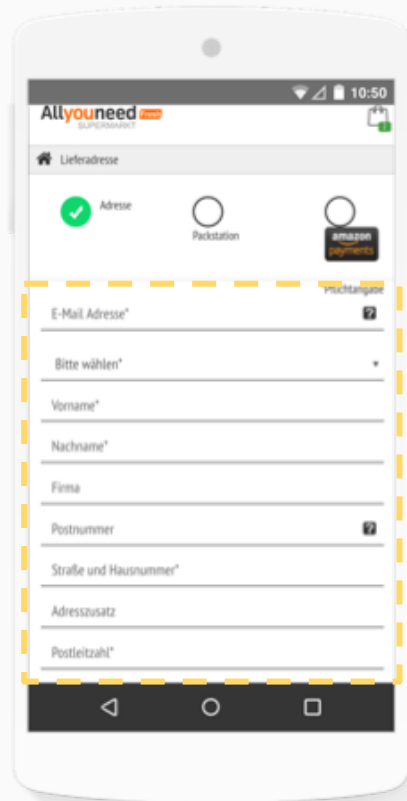
**Best performing e-commerce sites have 6-8 fields, total of 12 form elements.** Average retail checkout flow has 14.88 form fields.

## Optimize forms:

1. Use Full name field, lose the title.
2. Default Billing = Shipping address.
3. Collapse Address Line 2 + Company Name behind a link.

[Full research.](#)

# Case Study: AllYouNeedFresh



The 'Before' interface shows a 'Lieferadresse' (Delivery Address) screen. It features a green checkmark icon next to 'Adresse' and a radio button for 'Packstation'. Below these are several form fields: 'E-Mail Adresse\*', 'Bitte wählen\*' (a dropdown), 'Vorname\*', 'Nachname\*', 'Firma', 'Postnummer', 'Straße und Hausnummer\*', 'Adresszusatz', and 'Postleitzahl\*'. A dashed yellow box highlights the bottom half of the form, indicating areas for improvement. An 'amazon payments' button is visible on the right.

Before



The 'After' interface shows a 'KASSE' (Checkout) screen. It displays '45888' products for a total of '61,75 €'. The form fields are reorganized and simplified: 'Vorname\*' and 'Nachname\*' are at the top, followed by 'Straße und Hausnummer\*', 'Postleitzahl:' (with '45888' entered), 'Stadt\*', 'Land bestimmen:' (with 'Deutschland' selected), and 'Telefonnummer\*'. An 'Optional:' section includes 'Postnummer' and 'Adresszusatz / Firma / Nachbar'. A green dashed box highlights the main form area, and an orange arrow points to a 'save' button at the bottom right.

After

## What they did:

- Moving delivery date options to the start of the checkout process
- Adding a “continue to checkout” call to action in the basket at the bottom of the checkout
- Automatically determining the customer’s credit card type rather than having users select from a drop-down
- **Matching field length to the length of the input**
- Exposing title options through segmented controls
- **Using labels instead of placeholders for form fields**
- Enlarging the “save” call to action and making it more noticeable by adding contrast

## Results:

Transactions via mobile grew **51%**

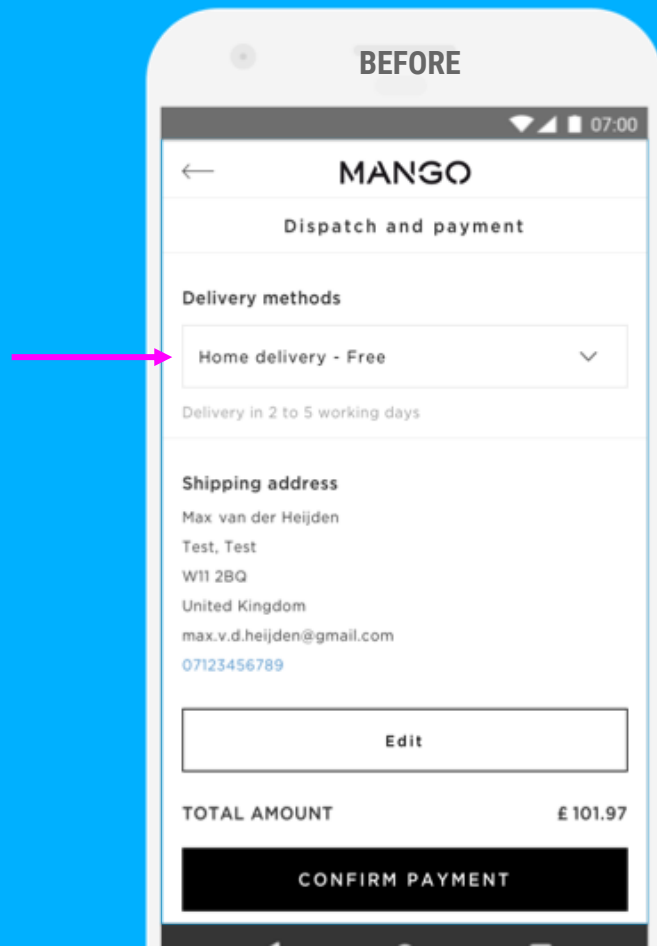
Mobile CVR improved **14%**

Drop-offs from order confirmation page dropped by **21%**

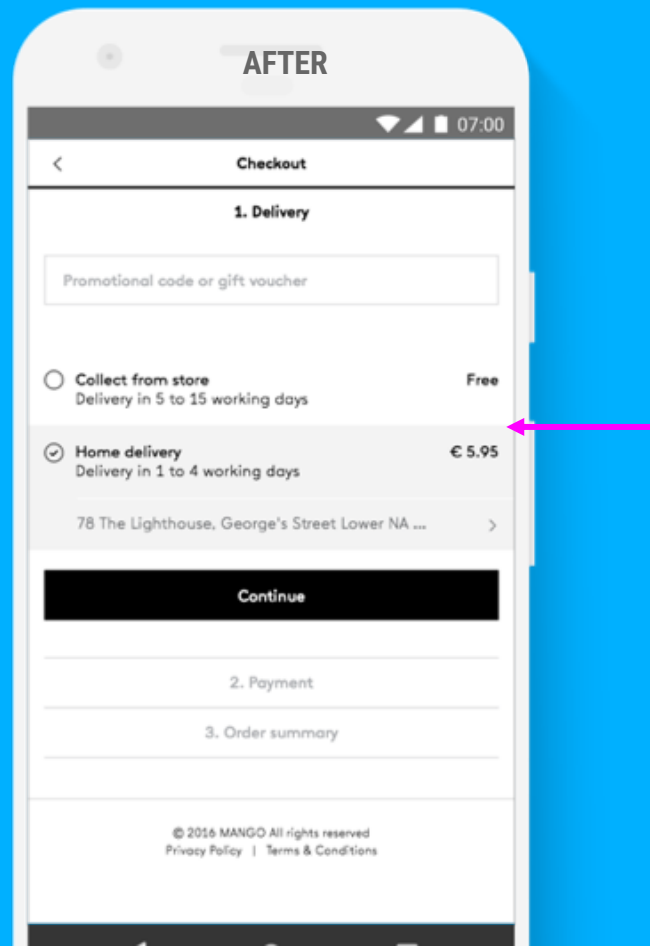
[Case study link](#)



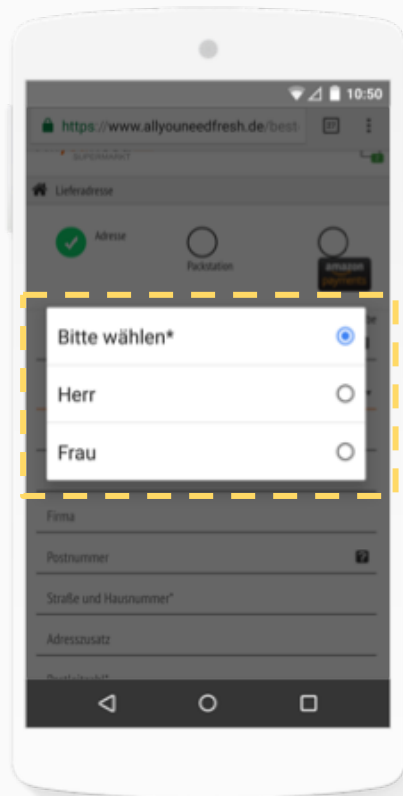
# DON'T USE DROP DOWNS IF LESS THAN 3 OPTIONS



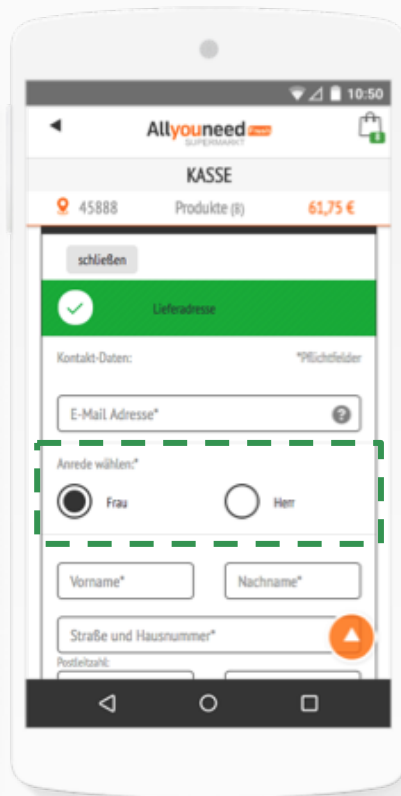
VS.



# Case Study: AllYouNeedFresh



Before



After

## What they did:

- Moving delivery date options to the start of the checkout process
- Adding a “continue to checkout” call to action in the basket at the bottom of the checkout
- Automatically determining the customer’s credit card type rather than having users select from a drop-down
- Matching field length to the length of the input
- **Exposing title options through segmented controls**
- Using labels instead of placeholders for form fields
- Enlarging the “save” call to action and making it more noticeable by adding contrast

## Results:

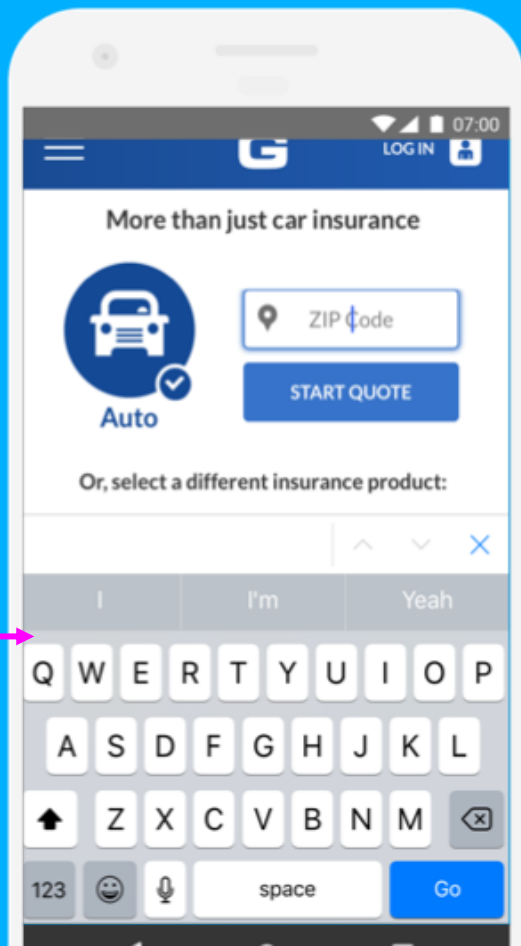
Transactions via mobile grew **51%**

Mobile CVR improved **14%**

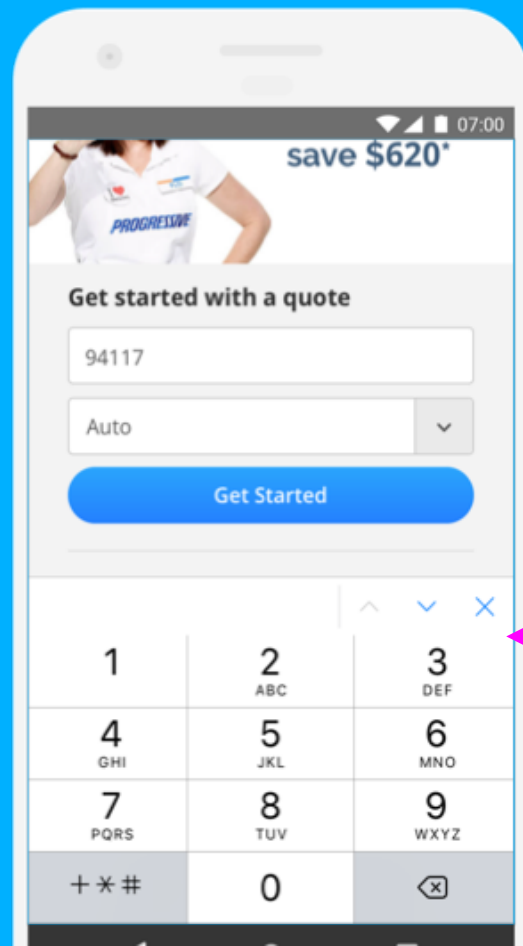
Drop-offs from order confirmation page dropped by **21%**

[Case study link](#)

## USE THE CORRECT KEYPADS (PHONE, ZIP, CREDIT CARD)



VS.



Thank you

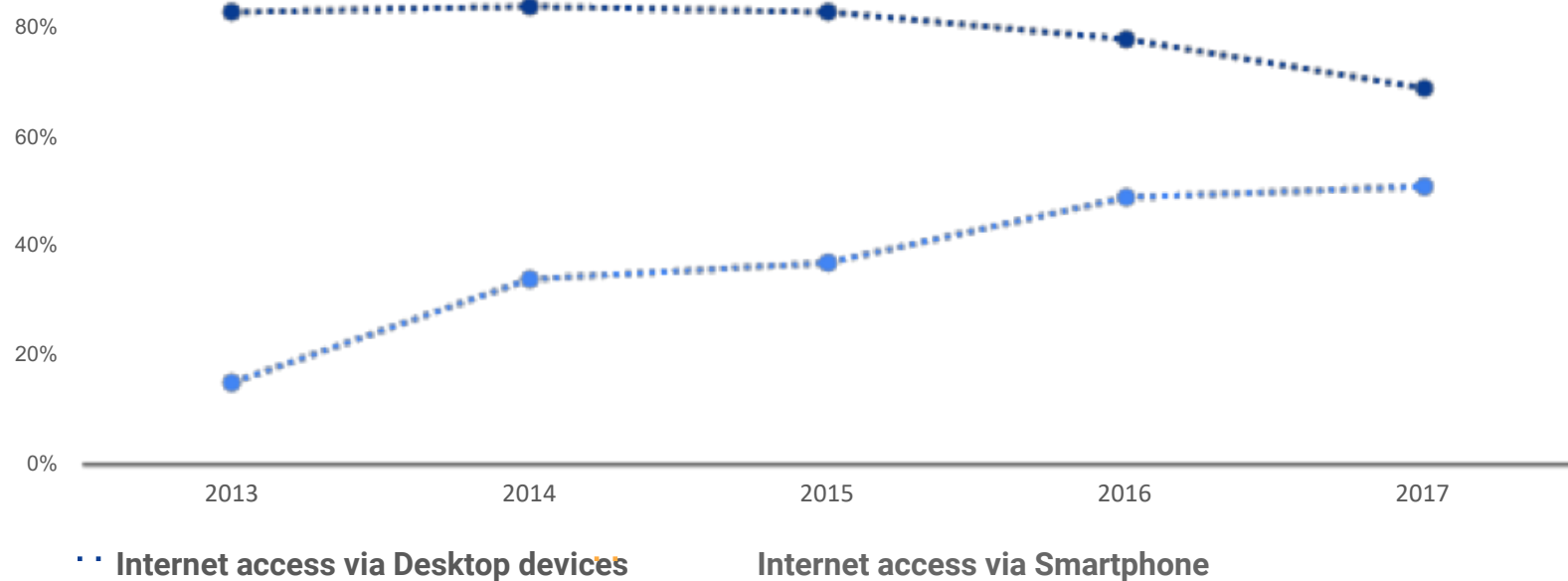


# How to make sure we have best discovery on Mobile for retail company?

Mariusz Gąsiewski

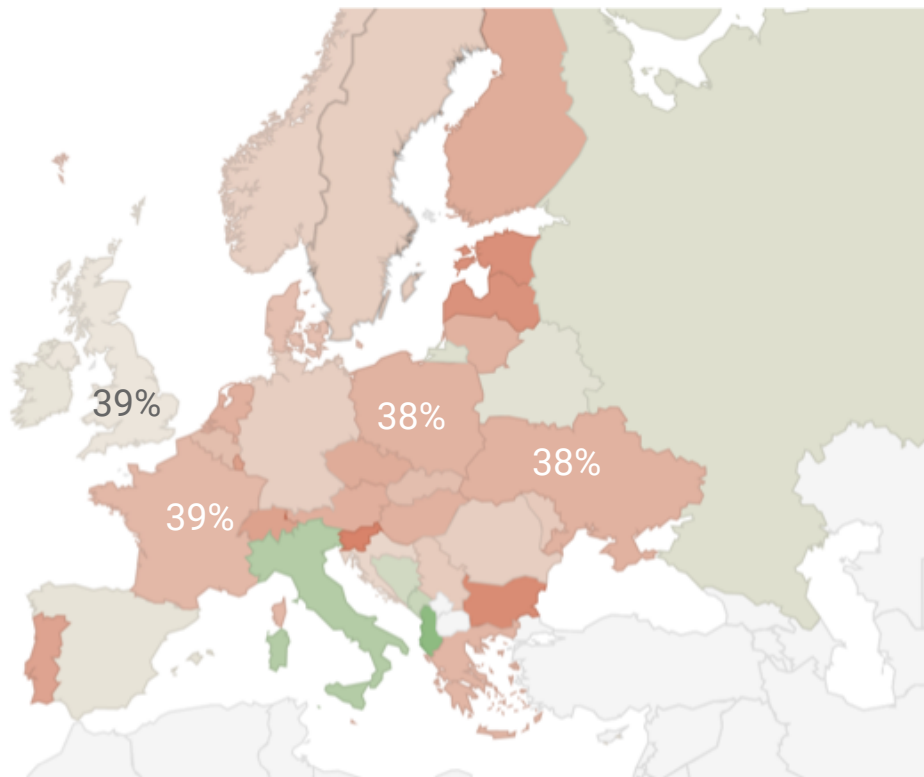
# Mobile in Ukraine is great story...

100% % of onliners accessing the internet with different devices



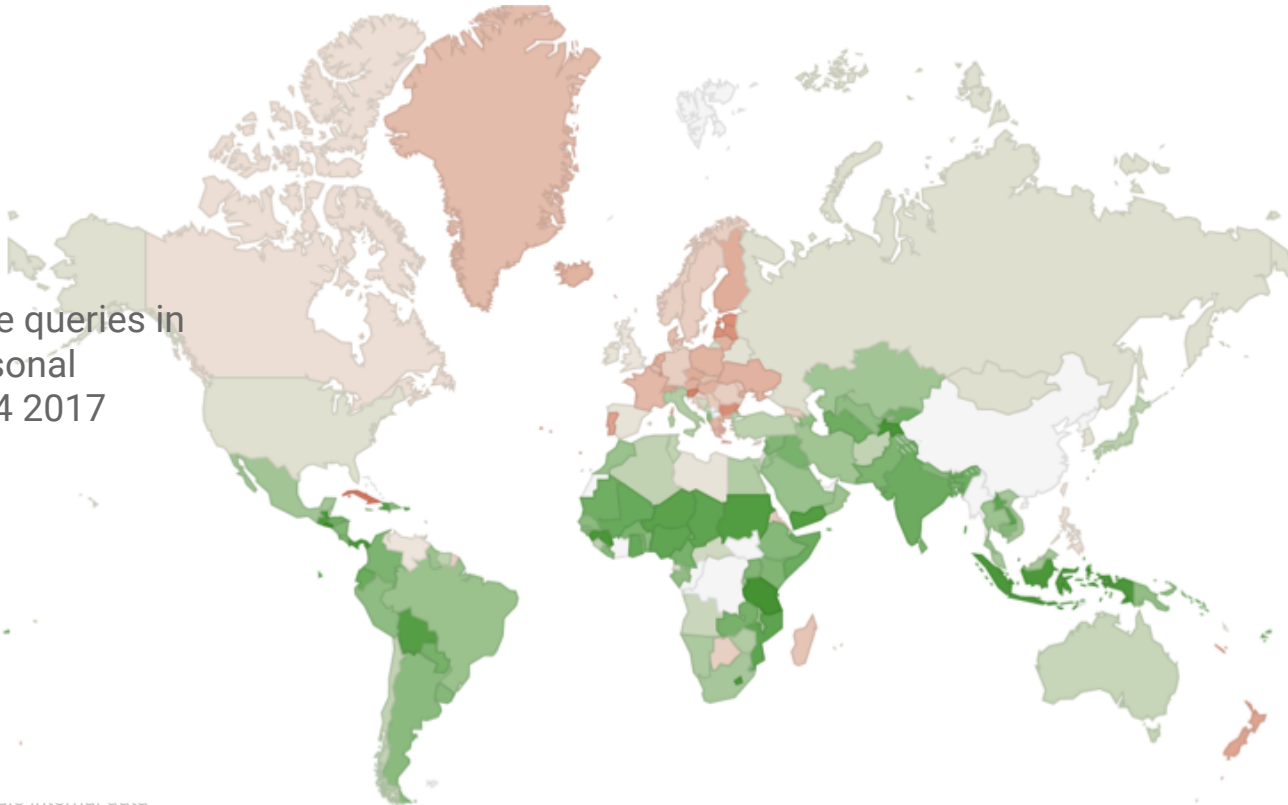
# Mobile is Ukraine is strong

Share of mobile queries in category: "Personal electronics", Q4 2017



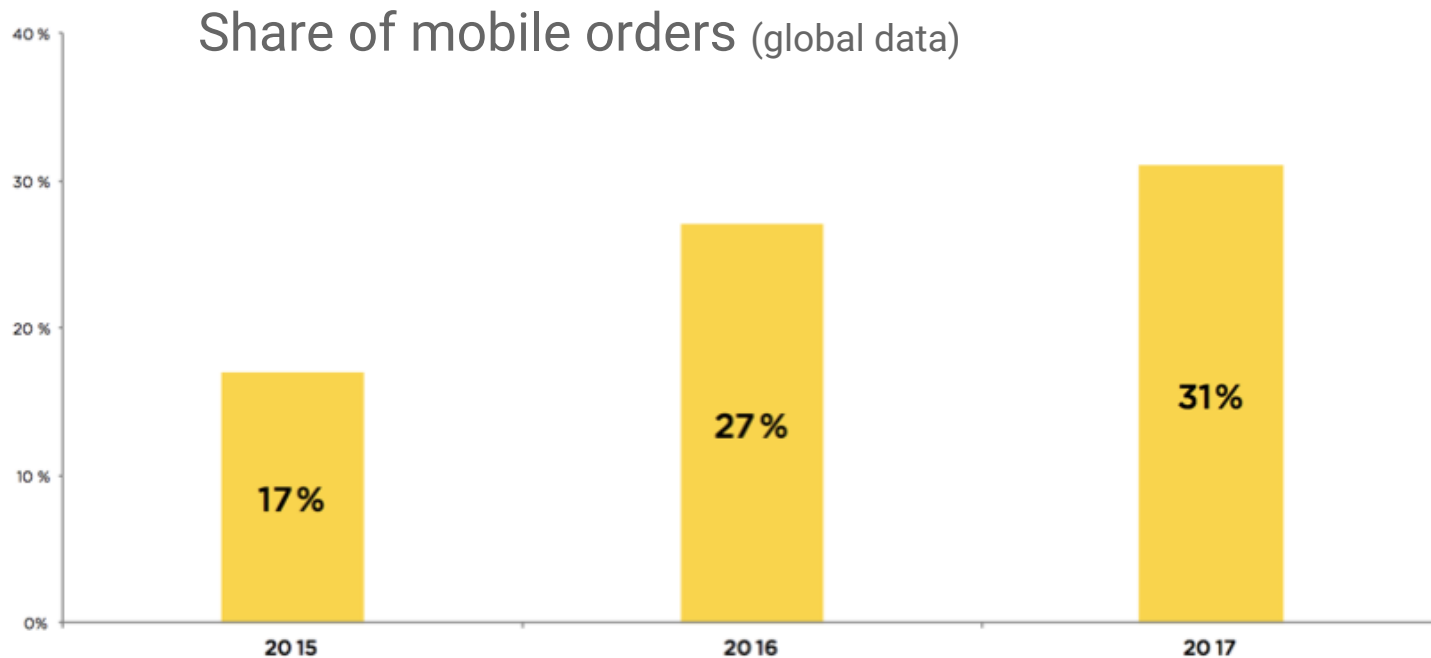
...although a lot will be coming yet

Share of mobile queries in  
category: "Personal  
electronics", Q4 2017

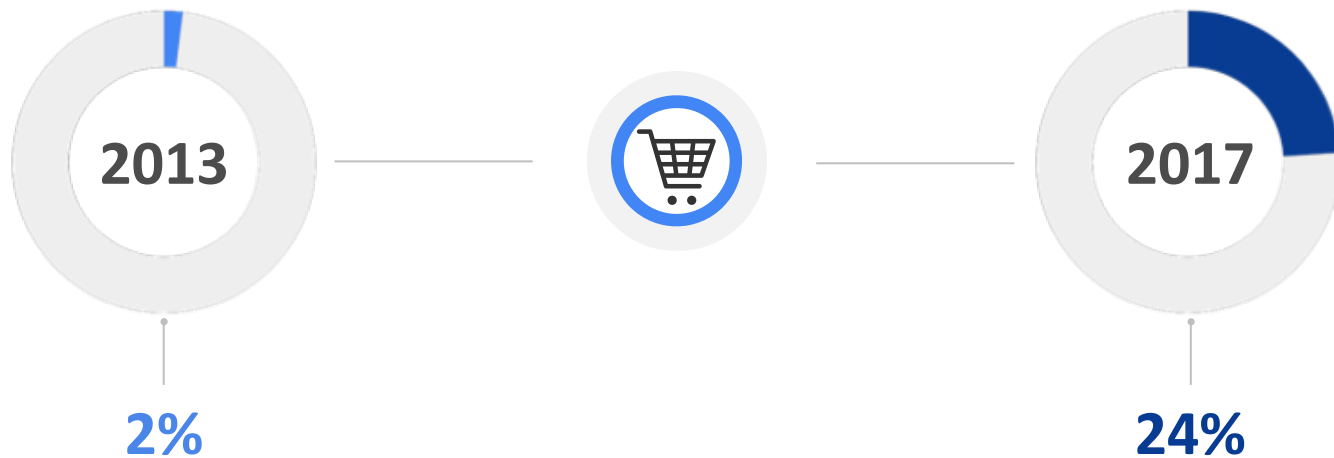




# It is about orders as well!



# It is about orders as well!



Share of online shoppers 16 years and older who shop at least as frequently via smartphone as via desktop devices



It is really great story!



Working with mobile is different story...



# Think about whole user journey



# It is the biggest priority for 2018

## **Important Areas for Their Future Digital Marketing Plans According to Client-Side Marketers Worldwide, by Region, Jan 2018**

*% of respondents*

	North America	Asia-Pacific	Europe
Optimizing the customer journey across multiple touchpoints	77%	69%	68%
Ensuring consistency of message across channels	66%	63%	61%
Training teams in new techniques, channels and disciplines	56%	62%	58%
Understanding how mobile users research/buy products	45%	53%	46%
Using online data to optimize the online experience	44%	51%	44%
Understanding when and where customers use different devices	40%	47%	38%
Using online data to optimize the online experience	40%	46%	36%

*Note: n=3,110; "very important"; over the next few years*

*Source: Econsultancy and Adobe, "Digital Intelligence Briefing: 2018 Digital Trends," Feb 13, 2018*



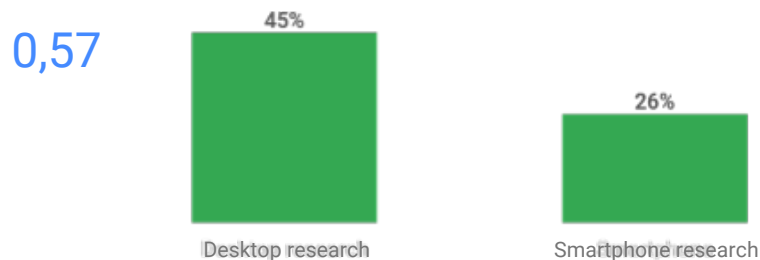
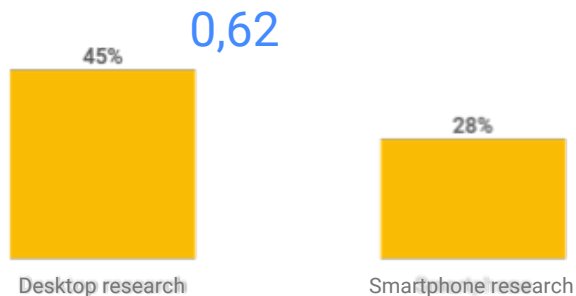
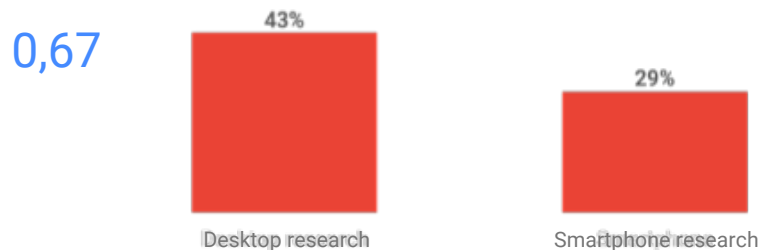
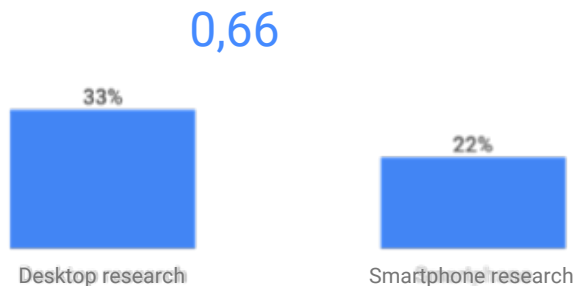
# Let's start with Discovery



Discovery



# Discovery: category “Apparel” in Ukraine as example





# Conversion rate is 3x lower on Mobile..

0,38

Conversion Rate by Device	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017
Desktop	3.92%	4.49%	4.01%	4.06%	4.05%
Smartphone	1.14%	1.57%	1.47%	1.59%	1.56%
Tablet	3.29%	3.89%	3.38%	3.76%	3.69%



# What about “Adding to cart”?

0,71



Add-to-Cart Rate by Device	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017
Desktop	11.02%	12.14%	11.19%	11.34%	11.34%
Smartphone	7.48%	8.89%	8.11%	8.55%	8.08%
Tablet	10.40%	11.90%	10.86%	11.59%	11.68%

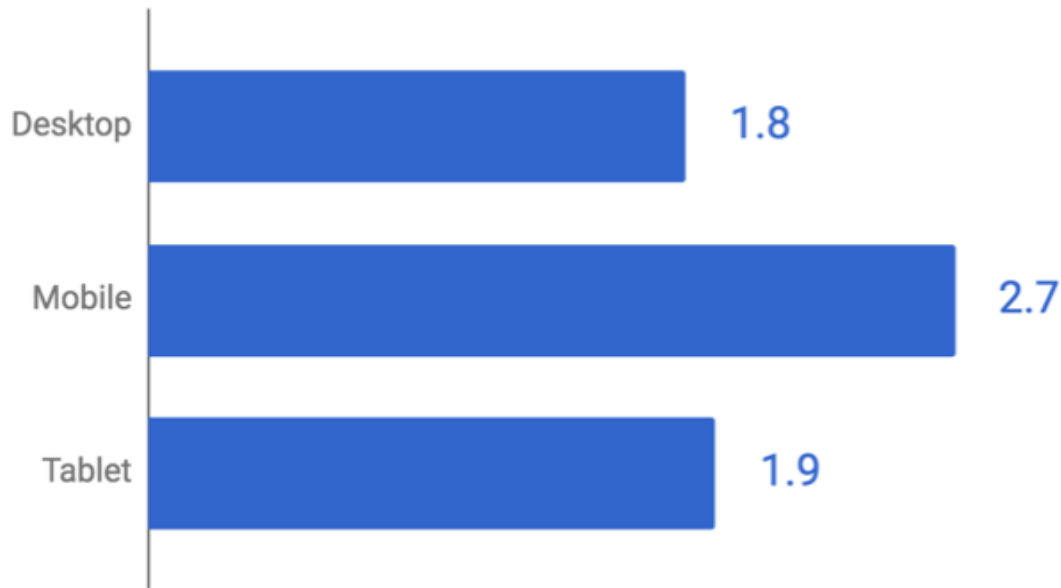


# Akamai report

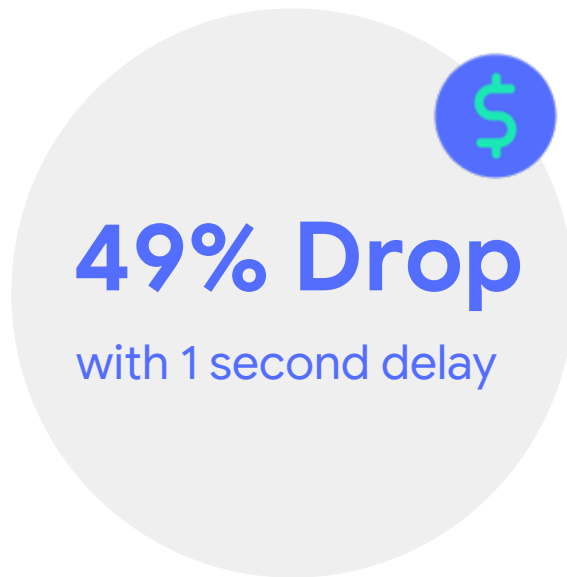
- one month's worth of anonymous user data from top online retailers
- 10 billions of visits



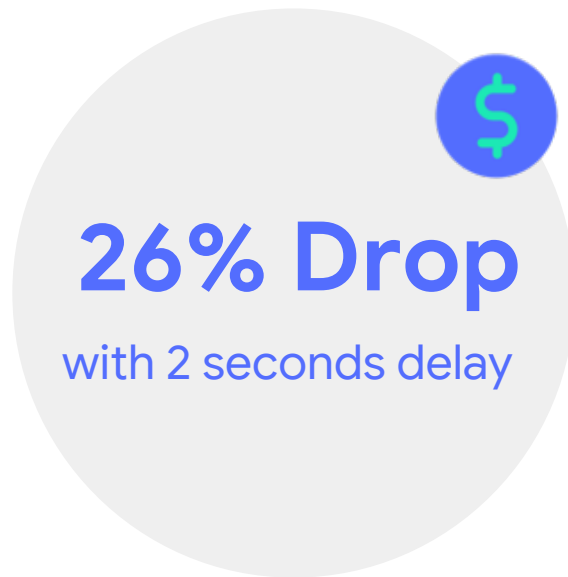
Optimal load times for peak conversions ranged from 1.8 to 2.7 seconds across device types.



# Influence of website delay on Bounce rate



# Influence of website delay on Conversion rate



A person wearing a pink shirt is holding a black smartphone with both hands, looking at the screen. They are wearing a green wristband on their left wrist and a colorful beaded bracelet on their right wrist. The background is blurred.

# 10sec

average mobile load time  
over 3G connections  
in Ukraine

# Quality of internet in Ukraine

Speedtest Global Index <i>October 2017</i>			
108	-	Tanzania	8.67
109	+5	Sudan	8.30
110	+2	Ukraine	8.22
111	+2	Venezuela	7.94
112	-	Uganda	7.83
113	+2	Bosnia and Herzegovina	7.57
114	-5	Uzbekistan	7.26





Reducing load time by 36% led to

10.5% increase in orders

27% increase in conversion rates

— AliExpress



# Winning on Mobile

## Winning on Mobile

Many factors contribute to an engaging mobile experience. And speed is chief among them. Most people will abandon a mobile site visit if the page takes more than a few seconds to load. Use our Speed Scorecard to see how your site stacks up to the competition.

United States

4G

+

Enter your domain to start your scorecard (e.g., yoursite.com)

→

Speed Scorecard

↶

Rank	Domain	Speed ⓘ
1		
2		
3		
4		



# Dataset Details: chrome-ux-report:all

[HOME](#) [CHROME DEVTOOLS](#) [LIGHTHOUSE](#) [PUPPETEER](#) [WORKBOX](#) [CHROME USER EXPERIENCE REPORT](#)

Chrome User Experience Report

[Overview](#)

Getting Started

## Chrome User Experience Report

The Chrome User Experience Report provides user experience metrics for how real-world Chrome users experience popular destinations on the web.

### Methodology


The Chrome User Experience Report is powered by real user measurement of key user experience metrics across the public web, aggregated from users who have opted-in to syncing their browsing history, have not set up a Sync passphrase, and have [usage statistic reporting](#) enabled. The resulting data is made available via:

1. [PageSpeed Insights](#), which provides URL-level user experience metrics for popular URLs that are known by Google's web crawlers.
2. [Public Google BigQuery project](#), which aggregates user experience metrics by origin, for all origins that are known by Google's web crawlers, and split across multiple dimensions outlined below.

### Metrics

☆☆☆☆☆

Internal: Count: 188, Average: 4.3



# Dataset Details: chrome-ux-report:all

The screenshot shows the Google BigQuery interface. On the left, there's a sidebar with a 'COMPOSE QUERY' button, 'Query History', and 'Job History' links. Below these is a search bar labeled 'Filter by ID or label' and a list of datasets under the 'chrome-ux-report' project, including 'all', '201710', '201711', '201712', '201801', and several 'country' tables. The main panel displays 'Dataset Details: chrome-ux-report:all'. It includes a 'Description' section with a text input field, a 'Details' table, and a 'Tables' list.

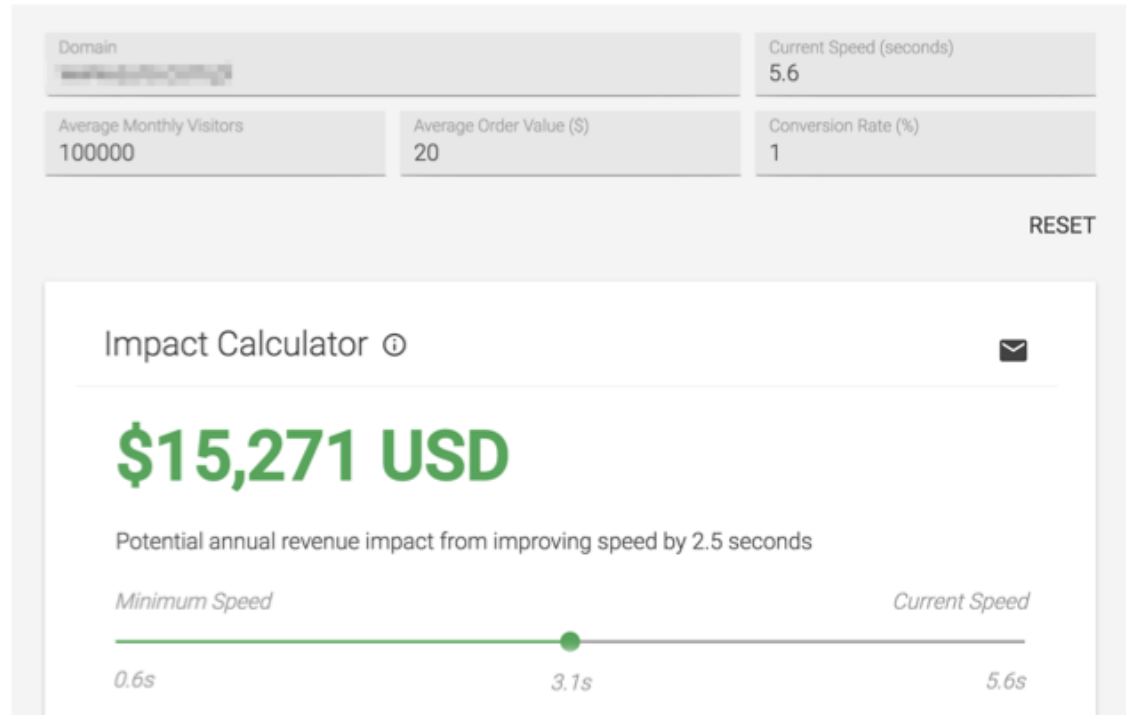
Details	
Default Table Expiration	Never <a href="#">Edit</a>
Data Location	US
Labels	None <a href="#">Edit</a>

**Tables**

- 201710
- 201711
- 201712
- 201801



# What is business outcome of speeding up your website?



What you **think**  
you've built





What you  
**actually** built



Manager

I'LL NEED THAT  
NEW BEACON  
INSTALLED!

Developer

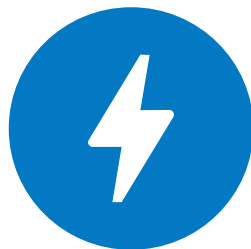


ok...





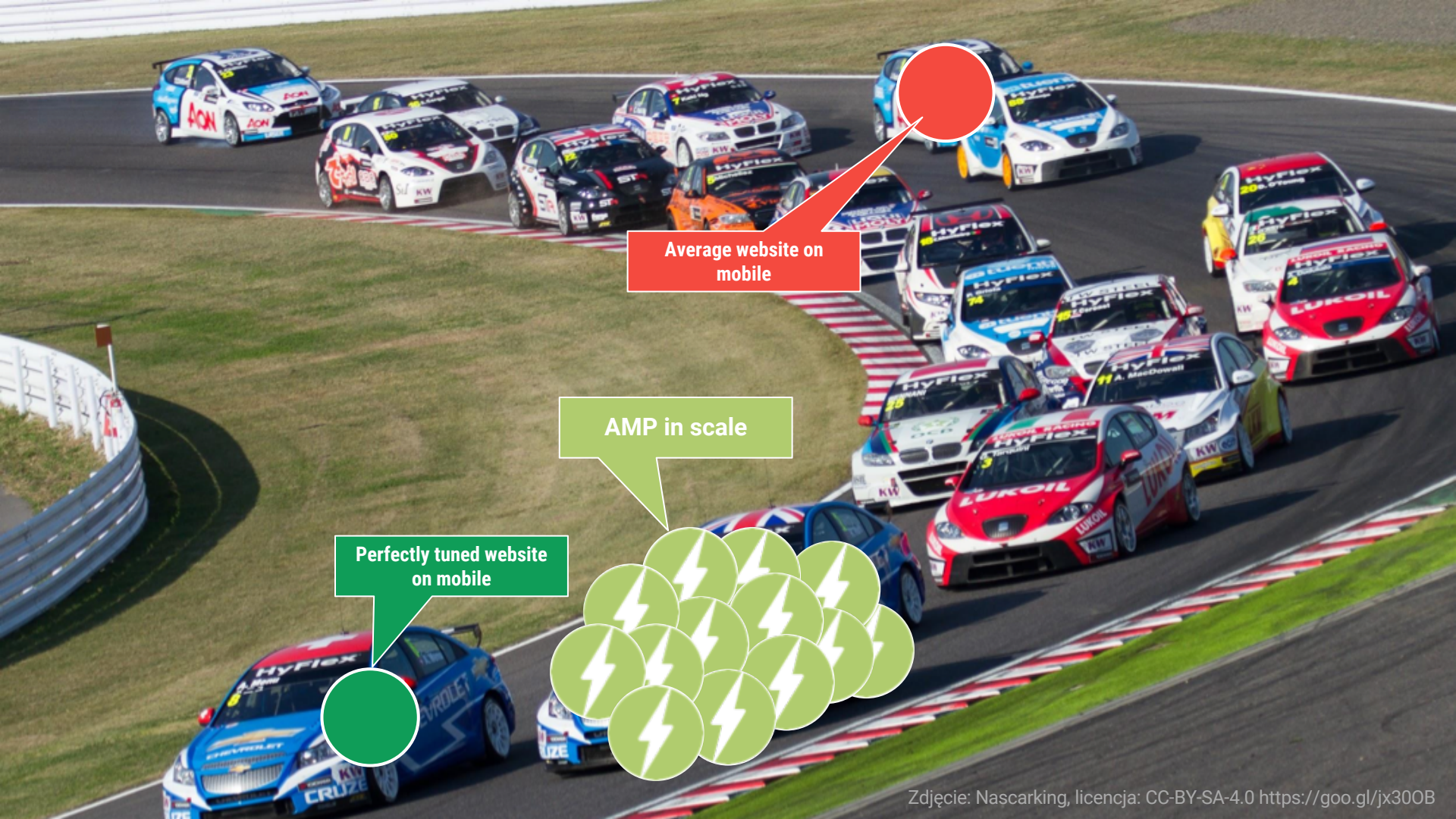
# What is AMP?



# AMP

- 4x faster
- 10x less data
- <1 second



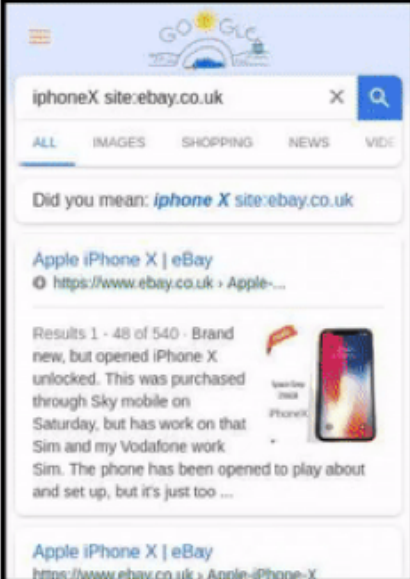




Average website on mobile

AMP in scale

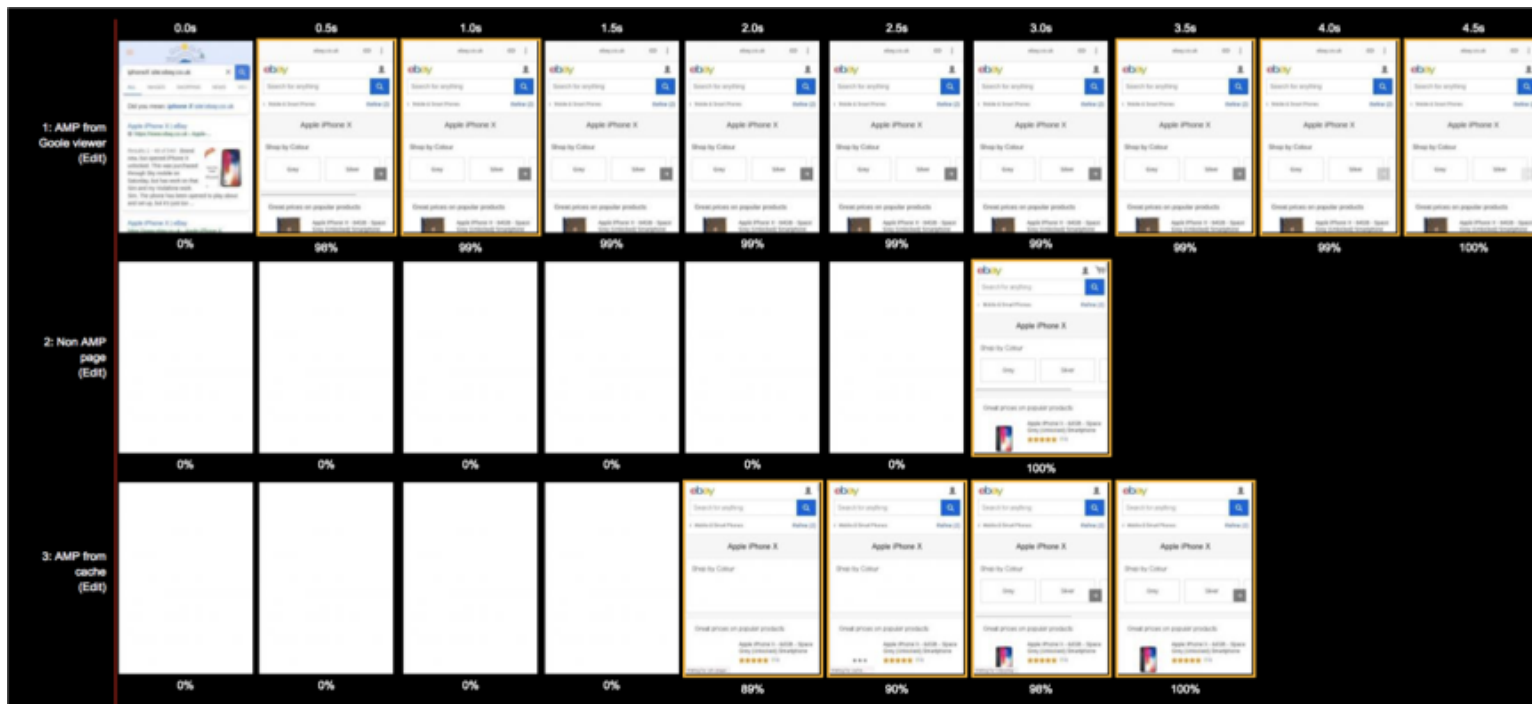
Perfectly tuned website on mobile

# Difference in speed coming from AMP

Ebay Prerendered	Ebay Canonical	Ebay From Cache
 <p>0.0</p>	 <p>0.0</p>	 <p>0.0</p>



# It really makes a difference for a user!



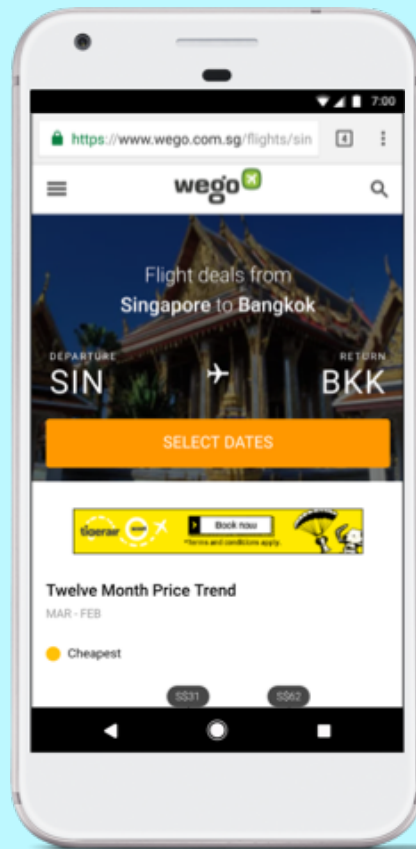


49% increase in search-to-conversion rates

95% increase in partner's conversion rates

Demo link:

<https://www.wegotravel.co.uk/flights-to/edi/cheap-flights-to-edinburgh.amp>





**28%** increase in online orders  
from mobile

**8X** average page loading time  
reduced to 0.62 seconds—8X faster





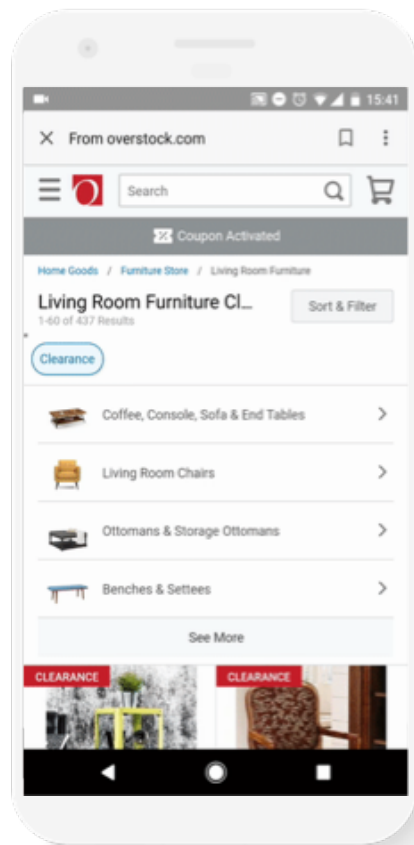


*Fast, interactive pages with AMP*

- 8% increase in conversion
- 36% increase in revenue

“The AMP pages allowed various product teams to realize how large our regular mobile web pages were and how slow they load.”

- **Overstock**



# Greenweez (Carrefour)

Faster pages = more mobile revenue

*“Thanks to our technical team agility and Arcane, our Data & Media Agency, we managed to migrate our mobile pages to AMP in less than 2 months”*

*Simon Le Fur, General Manager Greenweez*

+80%  
conv.  
rate

5x  
speed  
10s to 2s

-66%  
mCPA



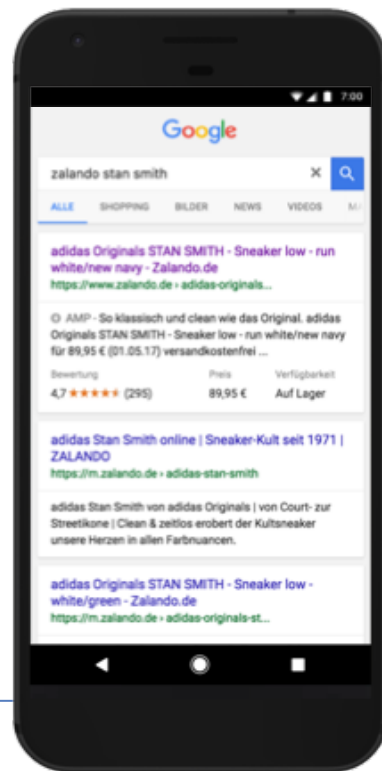


# Zalando example

"Pagespeed is a strategic lever for performance marketing optimisations.

At Zalando, we clearly see how already small improvements impact customer experience and finally our overall business KPIs"

Julia Stern | VP Performance Marketing | Zalando



80% of development teams  
build AMP Landing Pages in  
**less than 1 week.**



# AMP is built on 3 core components



AMP HTML



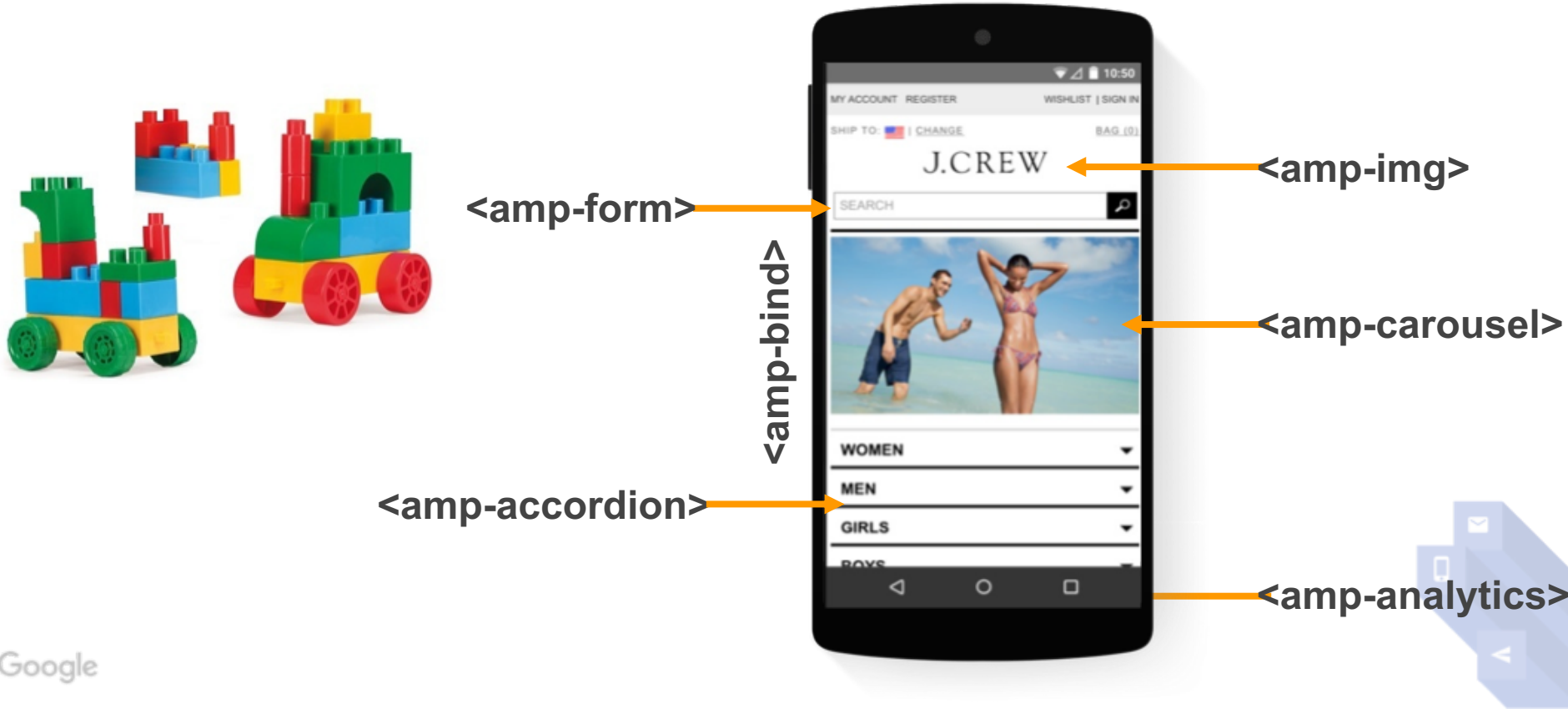
AMP JS



AMP Cache



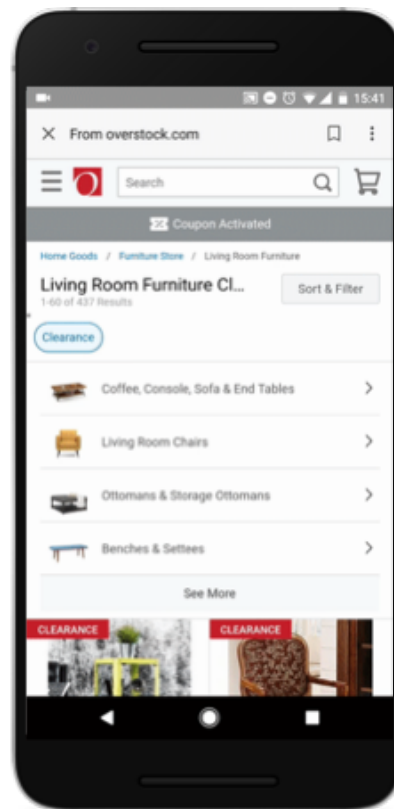
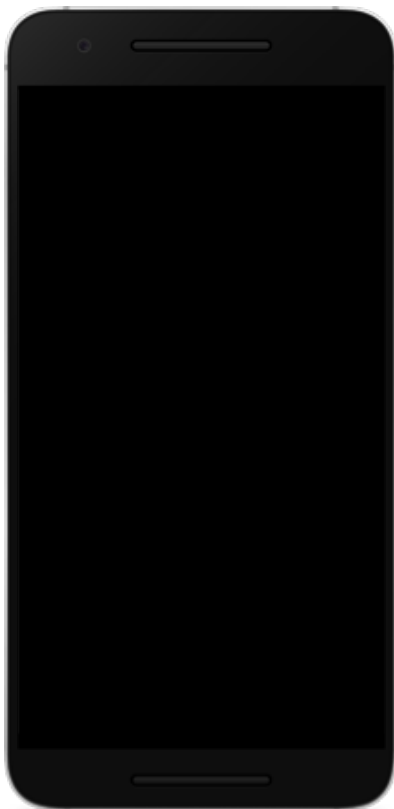
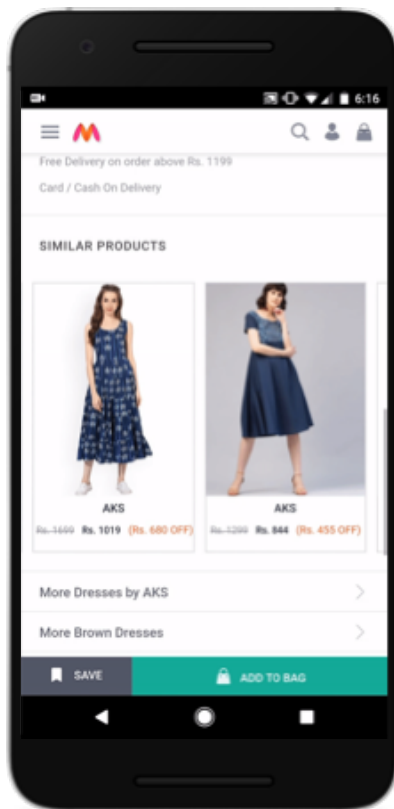
# Example AMP components (ampbyexample.org)



AMP components in action. Learn how to build AMPs using the built-in components.

Web components library

# You do not need to limit your creativity

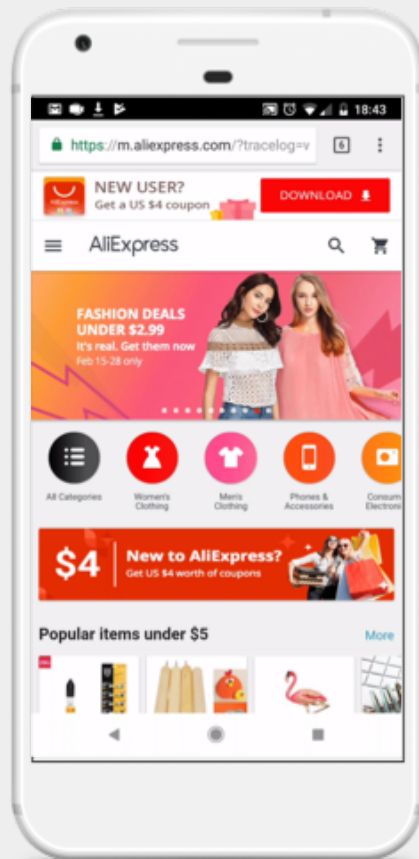


# Using AMP for building websites



[aliexpress.com](https://aliexpress.com)

- Full commerce site built with AMP
- Load time down < 3s



# Brands using AMP to improve speed & performance

LANCÔME  
PARIS

AliExpress™

RECRUIT

airbnb

1-800  
flowers.com

ebay

Alibaba.com

Jiji

HOT PEPPER  
ケルメ

snapdeal

Eventbrite

mercari

wego

zalando

goibibo.com

Rakuten





# AMP format usage continues to grow



**4B+**

total AMP pages



**25M+**

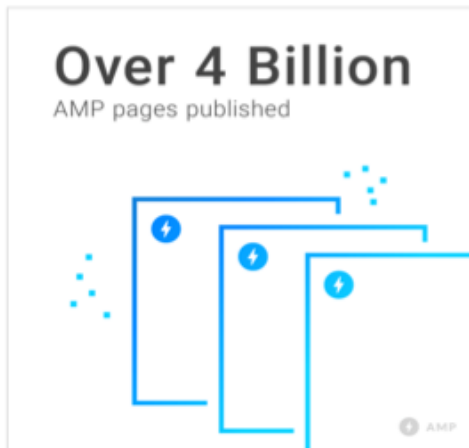
domains are producing  
AMP pages



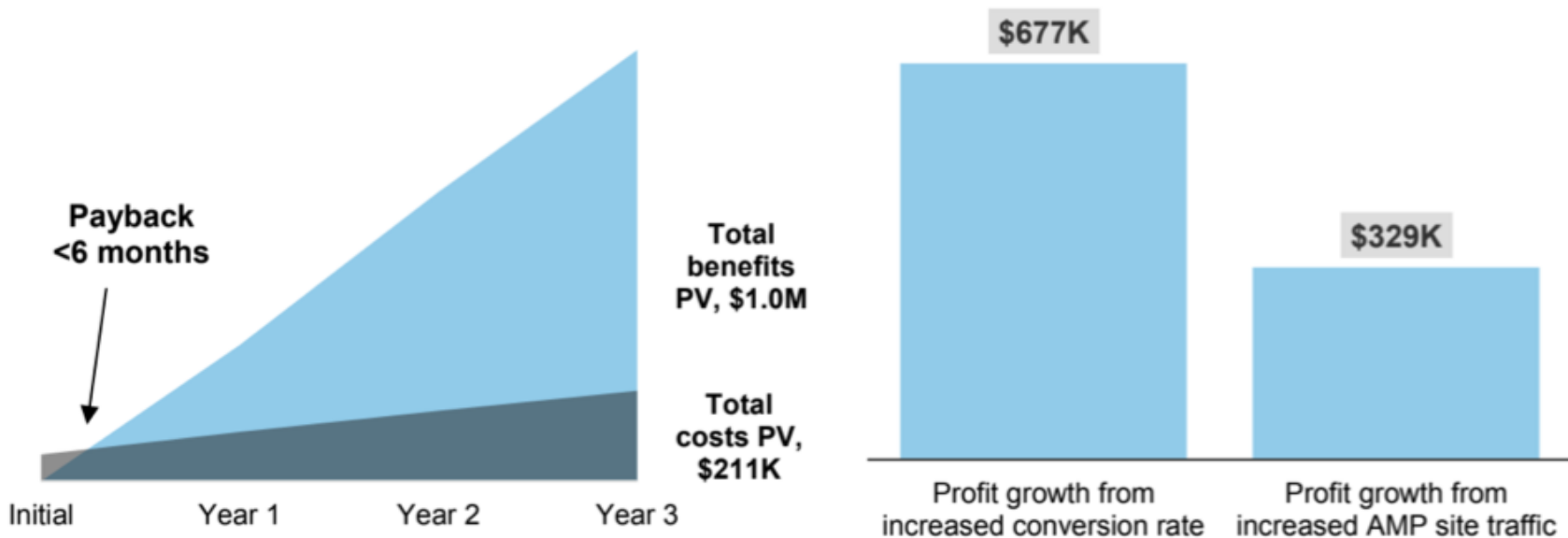
**20%**

increase in sales  
conversions with AMP





# Research “Total Economic Impact of AMP” is proving value added coming from AMP

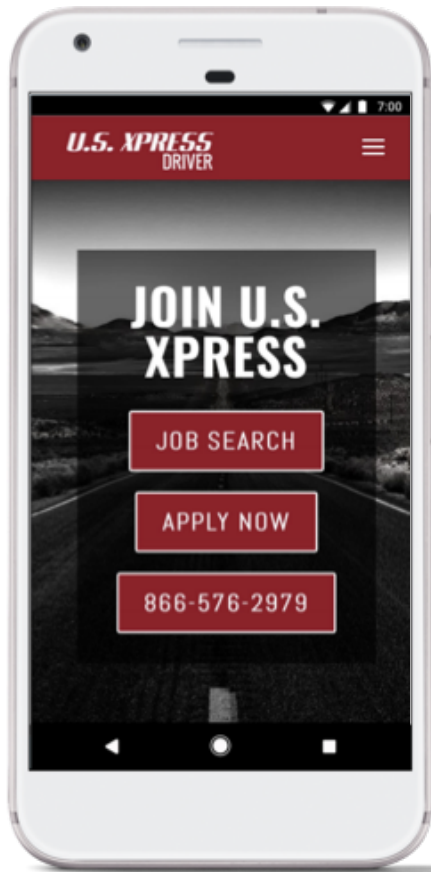




**5X** increase in page load speed

**\$1M** yearly projected savings

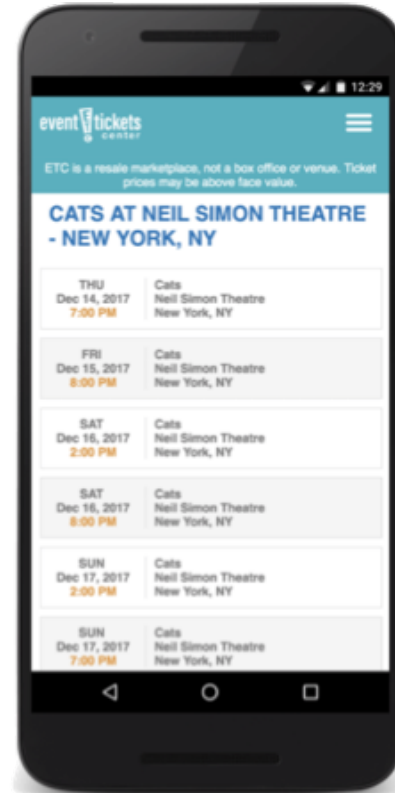
**62%** lift in conversion rate



# Event Tickets Center - ticket sale

## Results:

- Bounce rate decreased **by 10%**
- Conversion rate increased **by 20%**



# AMP in AdWords



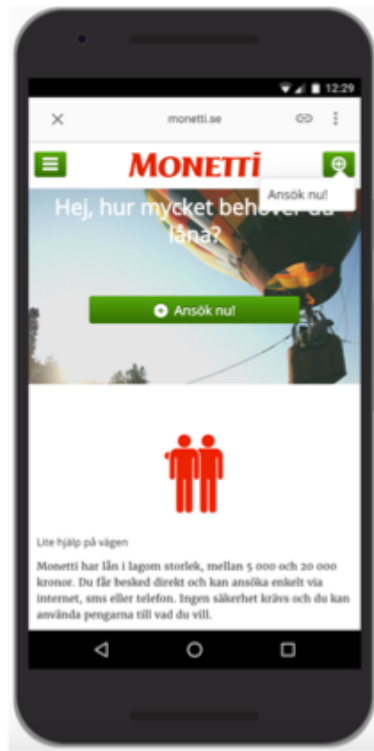
**AMP In  
AdWords**

**LAUNCHED**

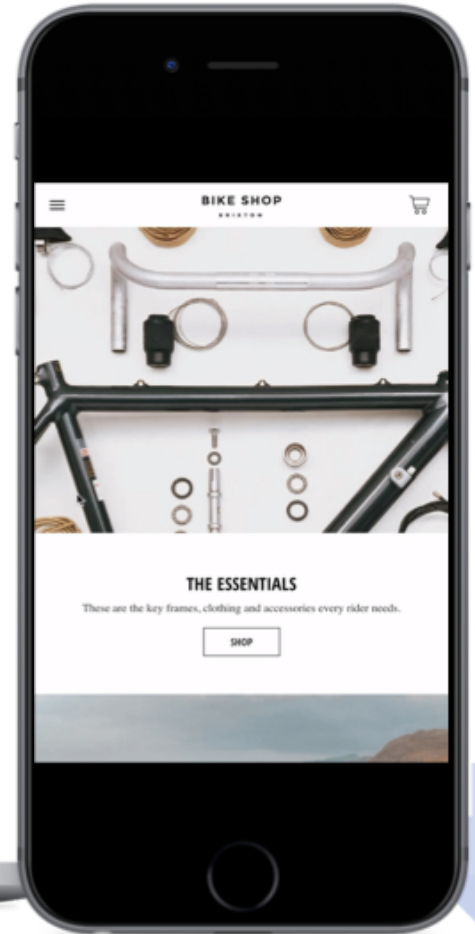
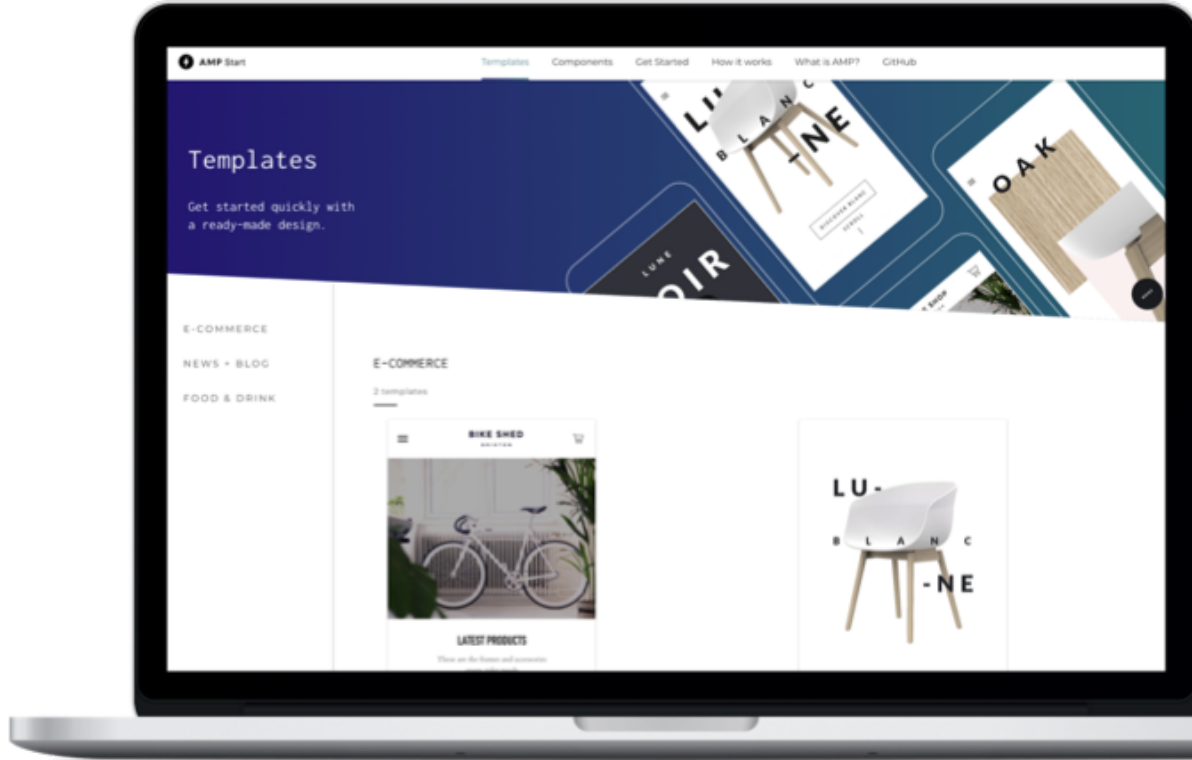


# AMP in AdWords

- Reduced load times by 84% (to 0.6sec)
- Increased AdWords conversions +19%
- A/B tested AMP performance in AdWords

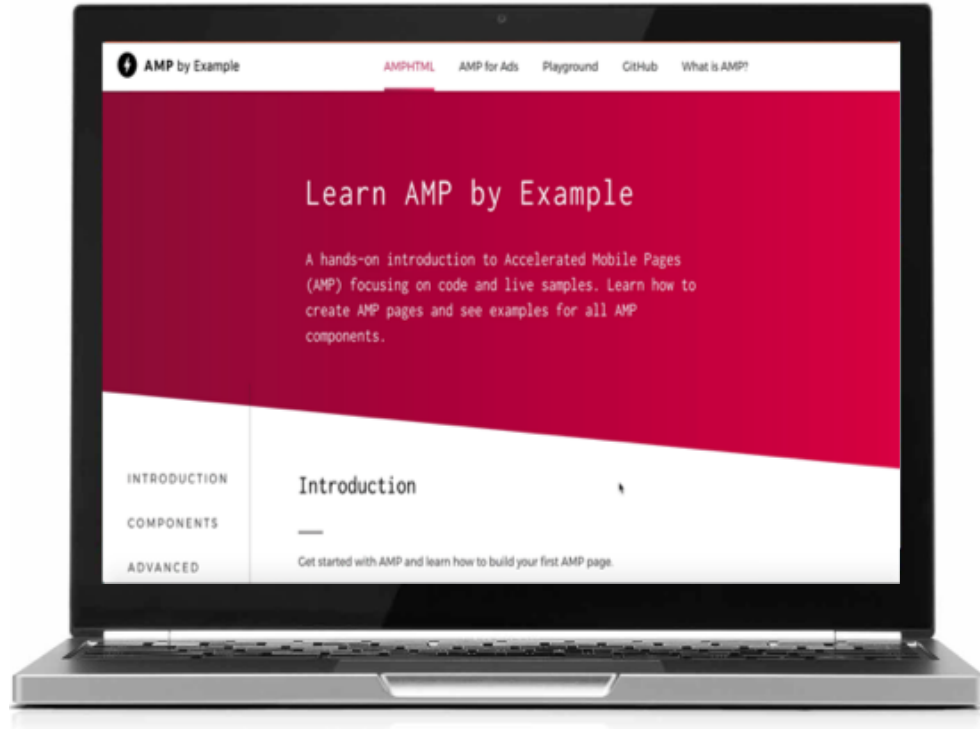


# AMP Start (ampstart.com)

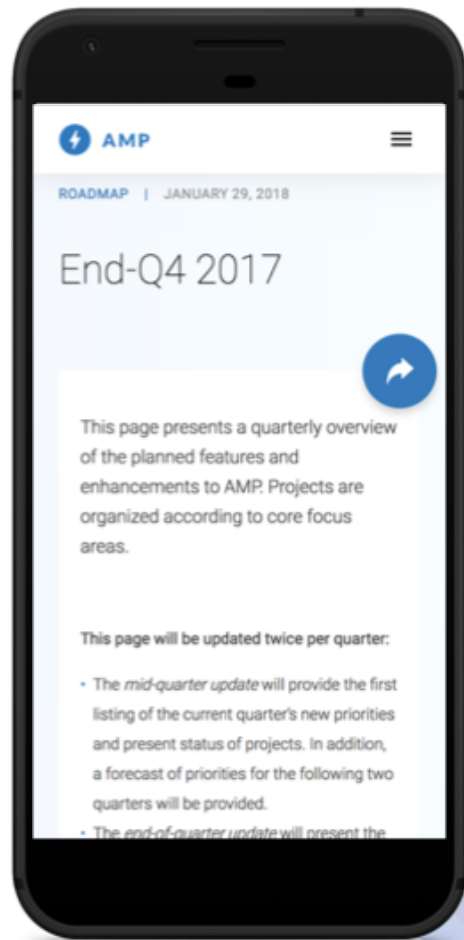




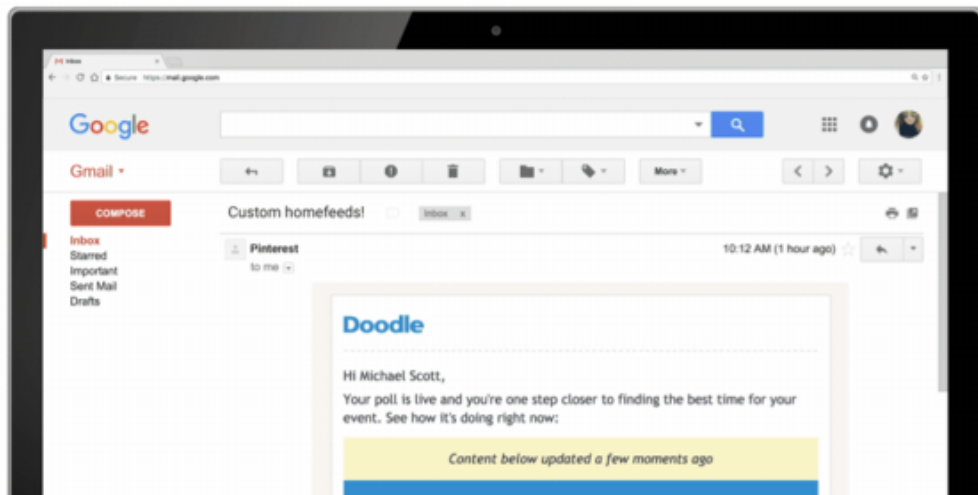
# AMP By Example (ampbyexample.com)



For full roadmap:  
[ampproject.org/roadmap](https://ampproject.org/roadmap)



# Dynamic, up-to-date and actionable emails



## AMP for Email

# ANNOUNCED

*Sign up for the Gmail Developer  
Preview of AMP for Email:*

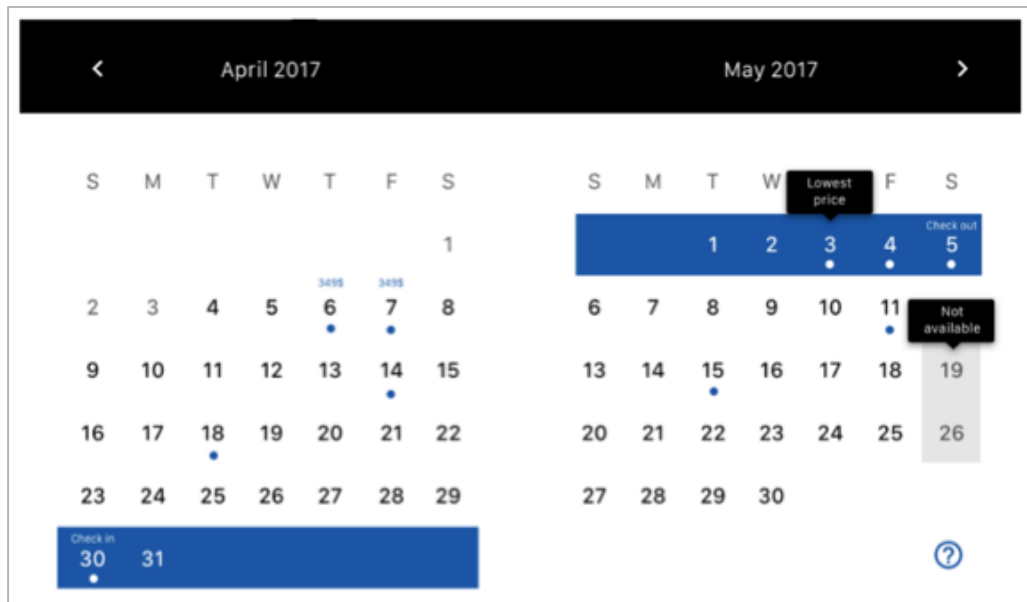
[g.co/AMPforEmail](https://g.co/AMPforEmail)

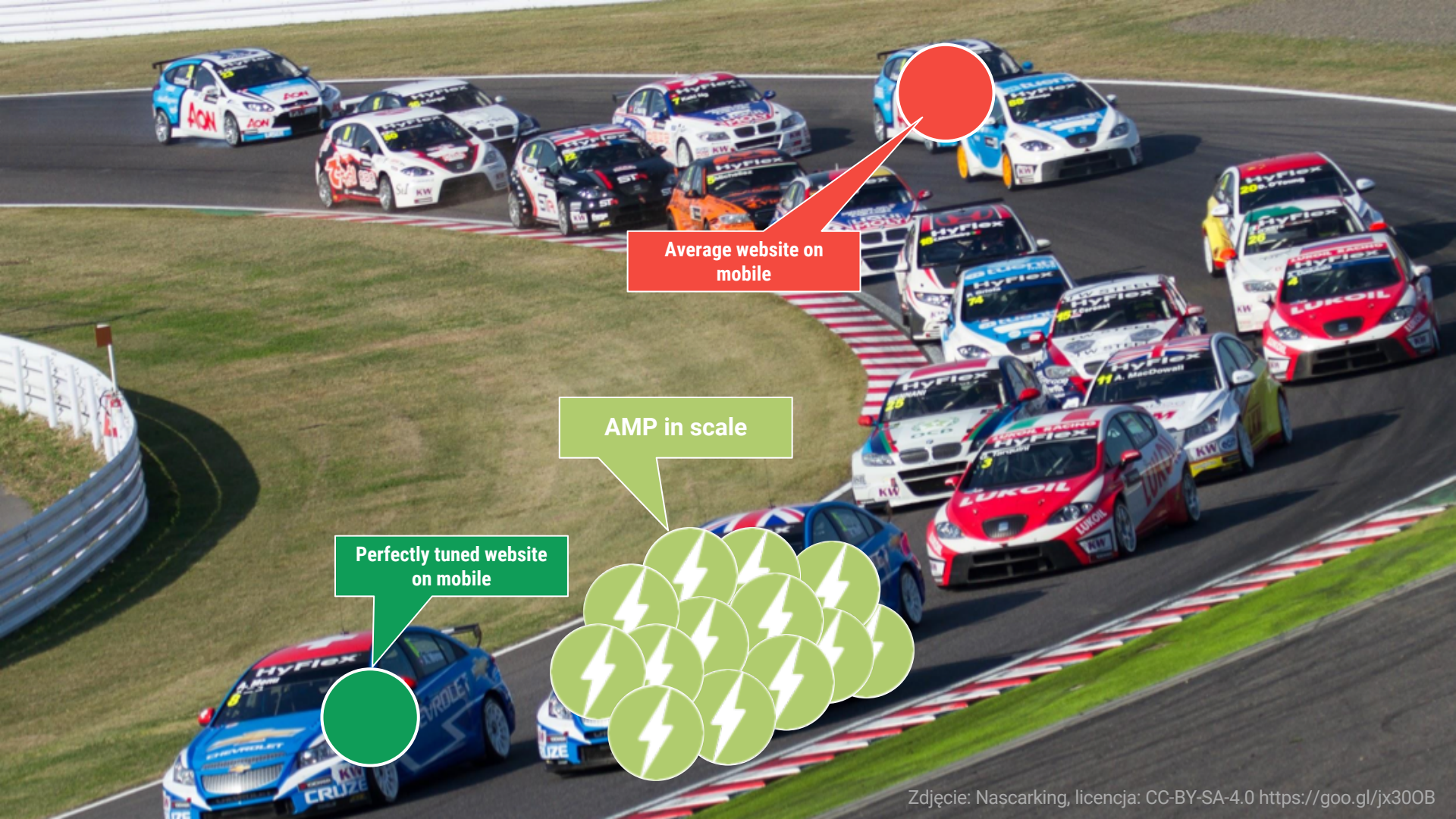


# New (experimental): <amp-datepicker>

- New date picker is now available for experimenting with

Details: [ampproject.org/latest/blog](https://ampproject.org/latest/blog)





Average website on  
mobile

AMP in scale

Perfectly tuned website  
on mobile

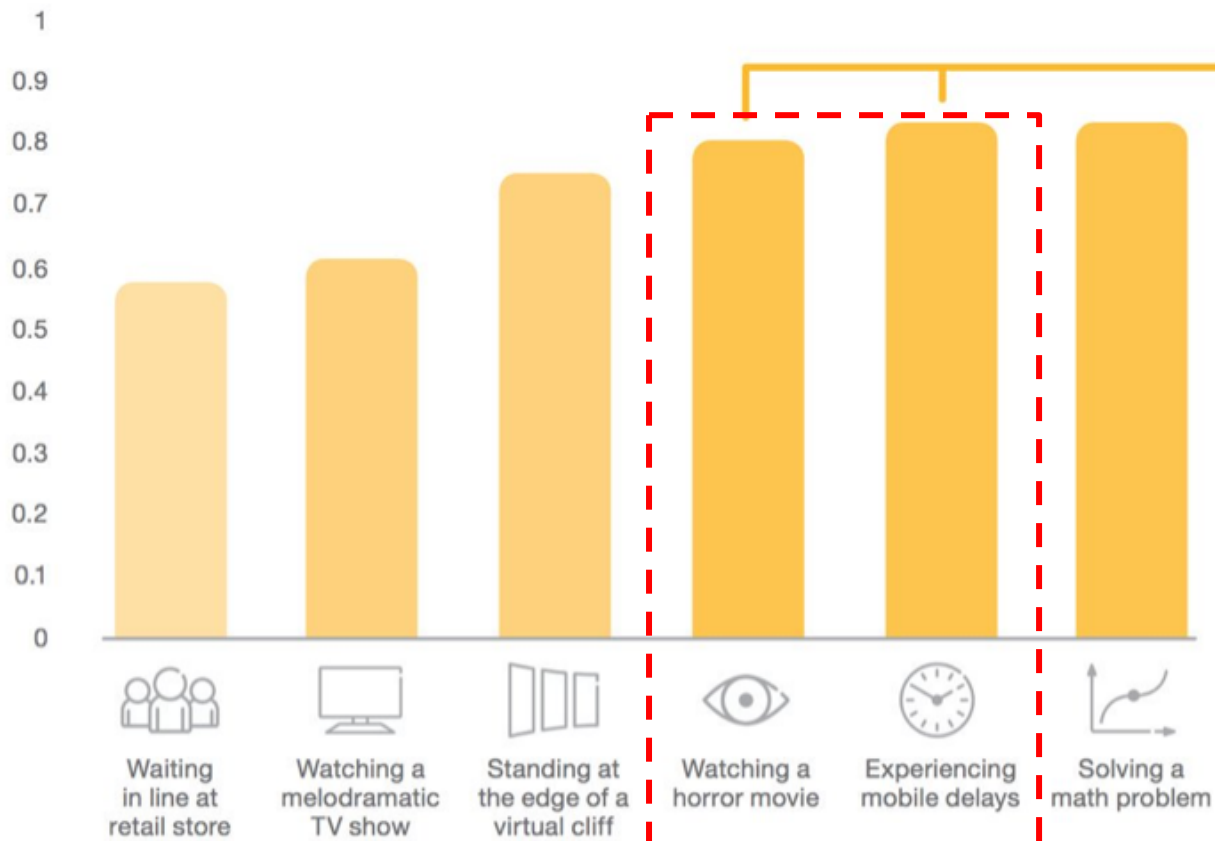
Thank you



# The most efficient ways to optimize speed of mobile assets

Grygorii Krutii

## Cognitive load associated with stressful situations

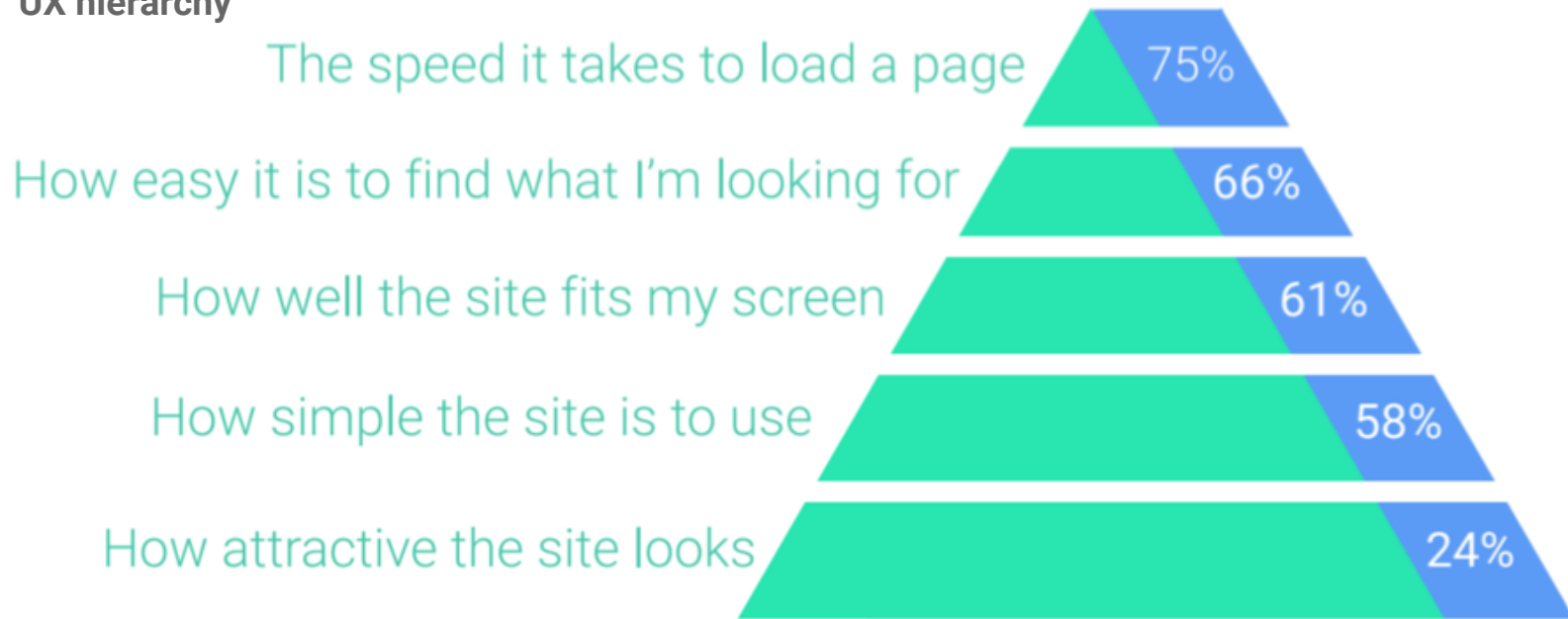


The level of stress caused by mobile delays was comparable to watching a horror movie



# Users asked what is most important

## UX hierarchy



# We crawled 150K+ mobile landing pages and found that...

70%



of pages were  
**Over 1Mb**

35%

Over 2Mb

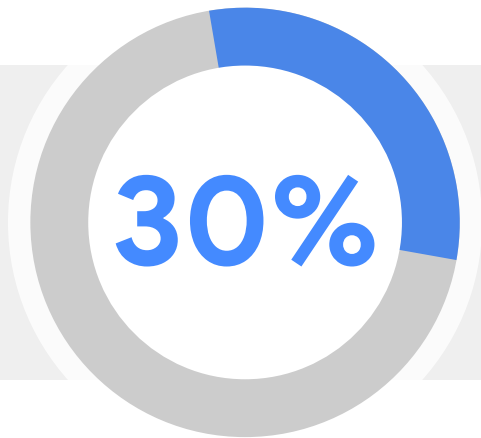
12%

Over 4Mb

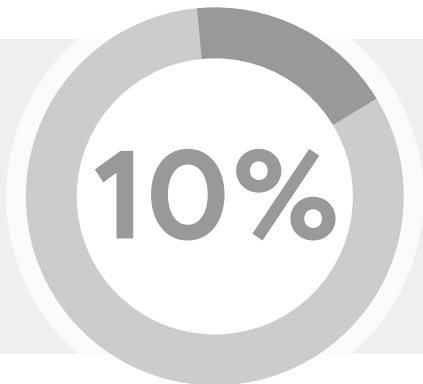
**Performance budget rule:**

“You need your page to weight less than 1Mb to display  
in 5s on a first view for a fast 3G”

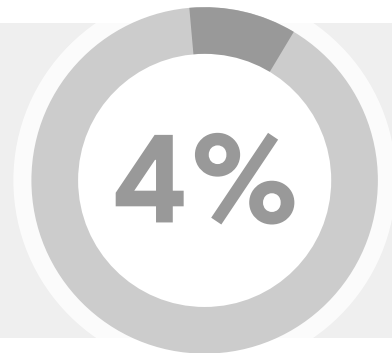
# And this is easily solvable!



of pages can save  
**over 300KB**



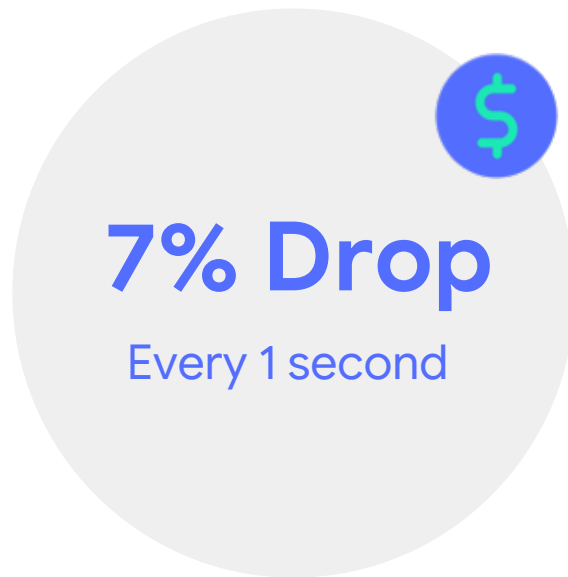
of pages can save  
**over 1MB**



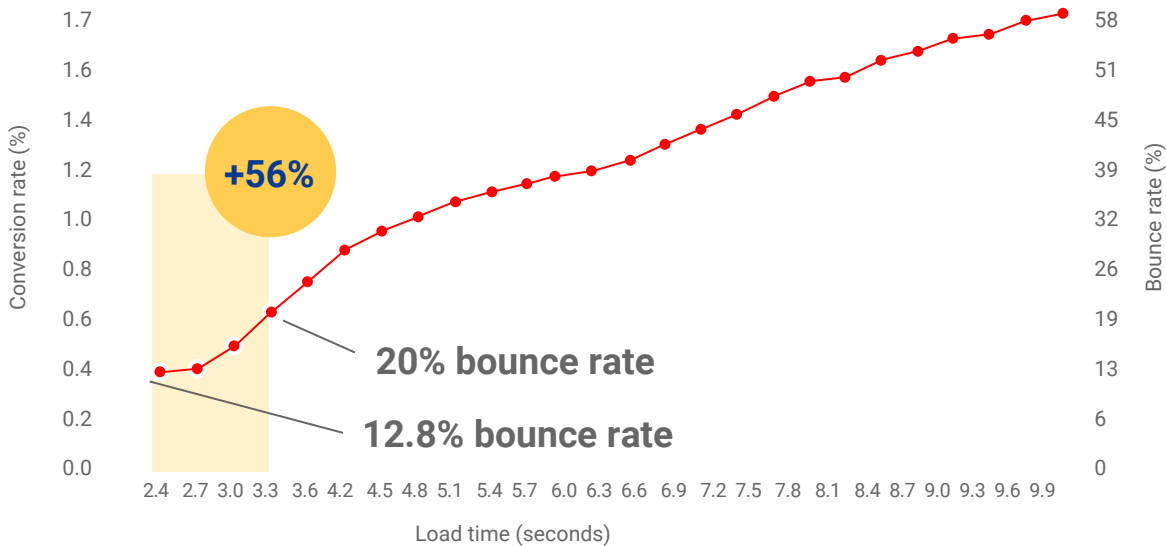
of pages can save  
**over 4MB**

each by properly compressing images and text

That's a lot of  
money!

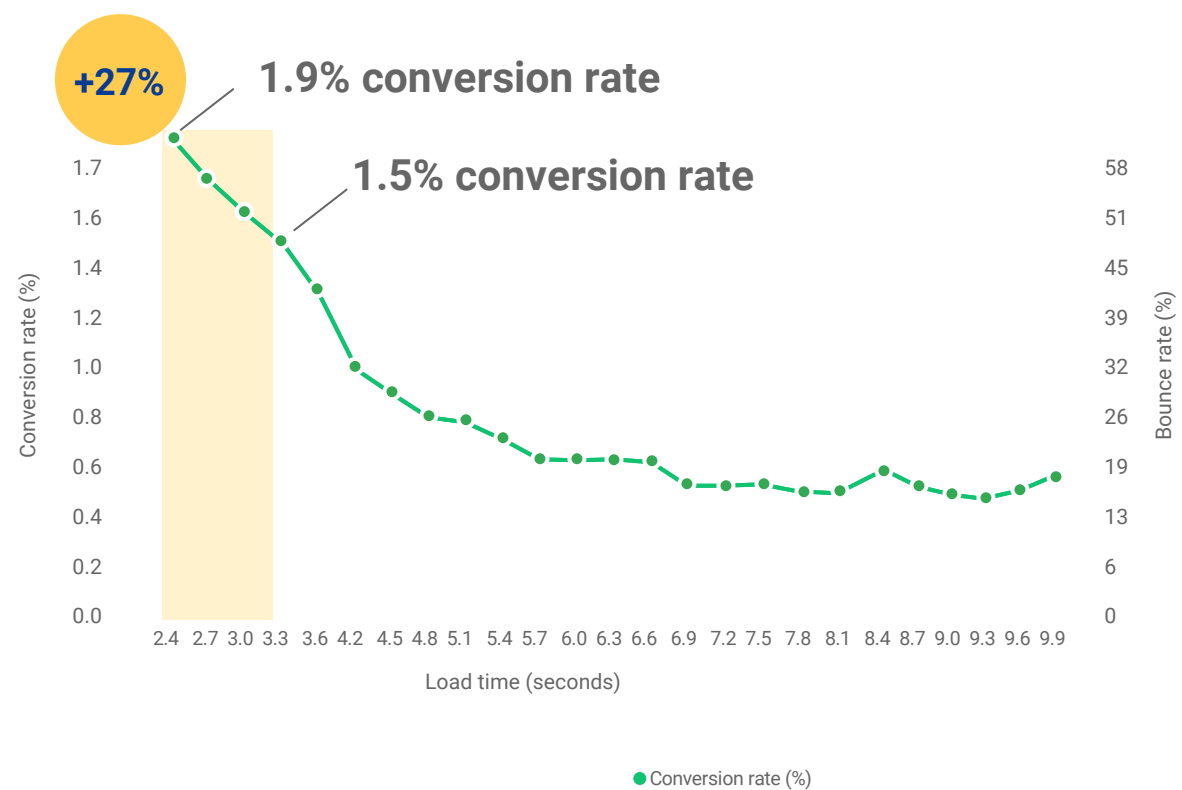


# Mobile pages that load 1s slower see up to +56% in bounce rate



Source: ["Mobile performance conversion rate"](#)

# Mobile pages that load 1s faster see up to +27% CvR



Source: "Mobile performance conversion rate"

## Using site speed in web search ranking

Friday, April 09, 2010

Webmaster Level: All

You may have heard that here at Google we're obsessed with speed, [in the lab](#) and [on the web](#). As part of that effort, today we're including a new signal in our ranking algorithms: site speed. Site speed reflects how quickly a web page responds to web requests.

Speeding up websites is important — not just to site owners, but to all users. Faster sites create happy users and we've seen in our [internal studies](#) that if a page responds slowly, visitors spend less time there. But faster sites don't just create a better experience; recent data shows that improving site speed also [reduces bounce rates](#). Like us, our users place a lot of value in speed — that's why we've decided to include site speed into account in our search rankings. We use a variety of sources to measure the speed of a site relative to other sites.

## Using page speed in mobile search ranking

Wednesday, January 17, 2018

People want to be able to find answers to their questions as fast as possible — [studies](#) show that people really care about the speed of a page. Although speed has been used in ranking for some time, that [signal](#) was focused on desktop searches. Today we're announcing that starting in July 2018, page speed will be a ranking factor for mobile searches.

The "Speed Update," as we're calling it, will only affect pages that deliver the slowest experience to users and will only affect a small percentage of queries. It applies the same standard to all pages, regardless of the technology used to build the page. The intent of the search query is still a very strong signal, so a slow page may still rank highly if it has great, relevant content.

We encourage developers to think broadly about how [performance](#) affects a user's experience of their page and to consider a variety of [user experience metrics](#). Although there is no tool that directly indicates whether a page is affected by this new ranking



Hey! Check here if your site is mobile-friendly.

Search blog ...

Labels

Archive

Feed

Google on



Google Webmasters

YouTube 245K

Follow @googlewmc

# Measuring the mobile speed





# The most meaningful metric



Speed Index:  
2309

**Speed Index** is the average time at which visible parts of the page are displayed.



# The speed Index : speed perception

0.9s

1.6s

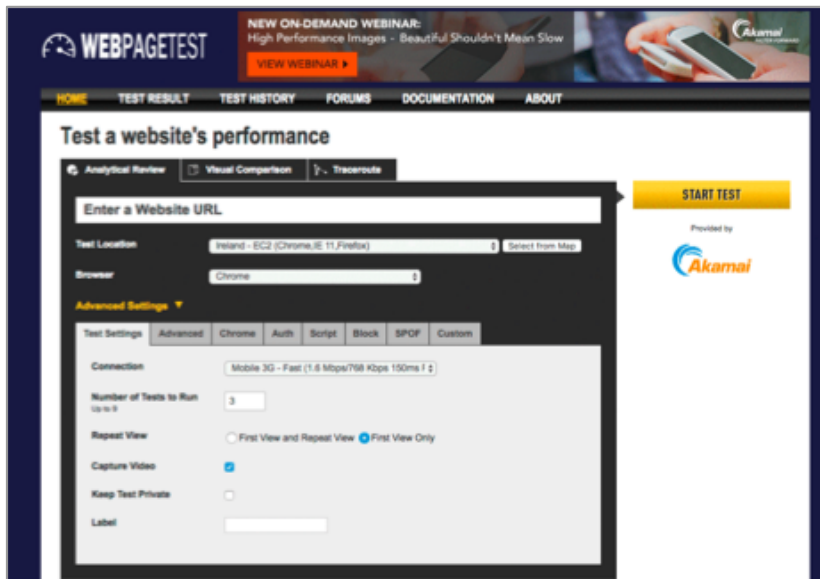


Speed Index : **750**

Speed Index : **1500**



# Get your speed index with webpagetest.org



[webpagetest.org/mobiletest](https://webpagetest.org/mobiletest)



Connection: **3G**



Number of tests: **3**



First View Only



Chrome (tab) :  
**Emulate Mobile Browser**  
(e.g. Nexus 5)



# How to optimize your mobile speed?



# Three steps to ensuring your mobile pages are speedy

- 1) Check easy to use tools before and after launch
- 1) Create a shared performance budget
- 1) Design for mobile with speed in mind



## 2) Create a shared performance budget across teams

1

Speed Index

Based on WPT on 3G



< 4 seconds

2

First Contentful Paint



< 2 seconds

3

Page Weight

*total number of bytes*



1.0 MB



# 3) Design for mobile with speed in mind

---



# Images

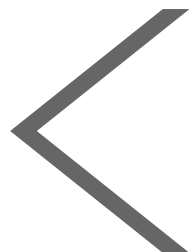
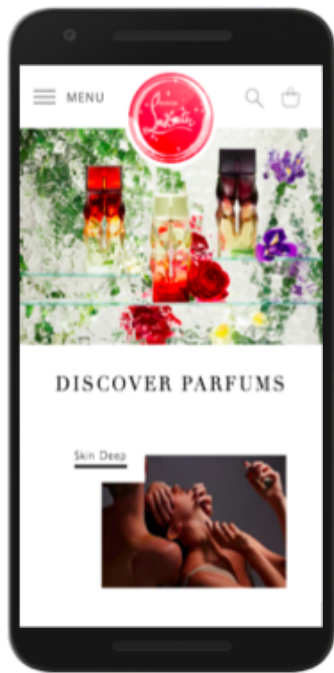




The **majority**  
of a webpage weight  
is **due to images**



# Download & shrink: don't do it!



1800 x 1200px

```
Img{  
  max-width:100%;  
}
```

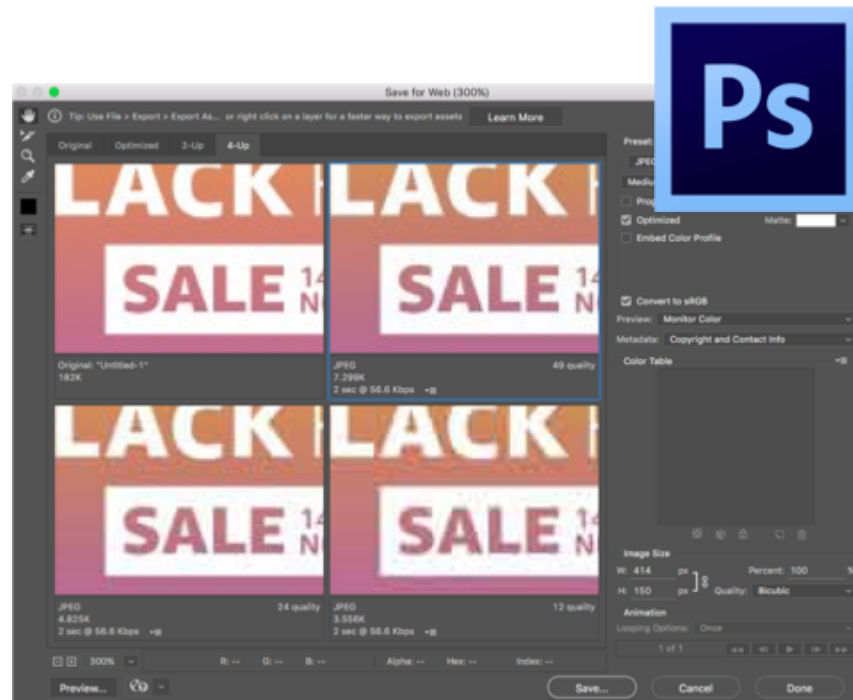


# Compress your images



8.4 KB  
414 x 150

8.8 KB  
414 x 150



# Optimize images Above the fold





1

2

3

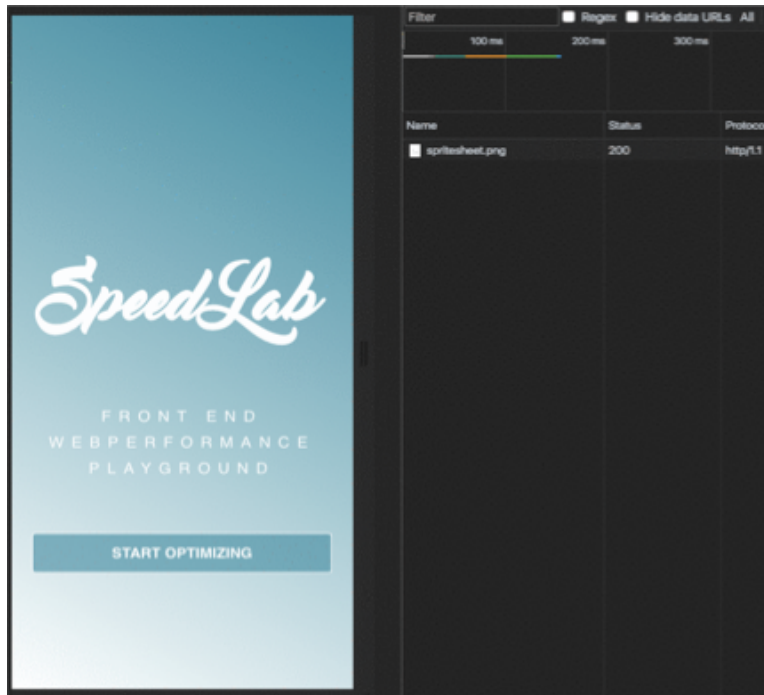
1493 ms

mS

# Loading on demand thanks to Lazy Loading



# Lazy loading



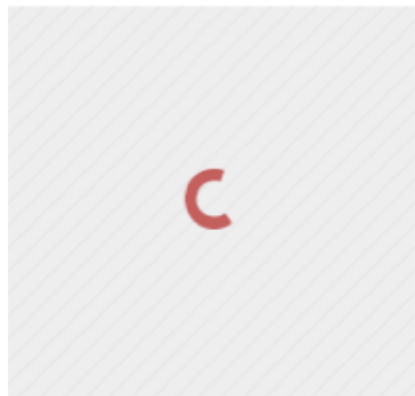
<https://github.com/aFarkas/lazysizes>

**Lazy loading** allow you to trigger the image download **before** the user need it.



# Lazy loading: images placeholder

---



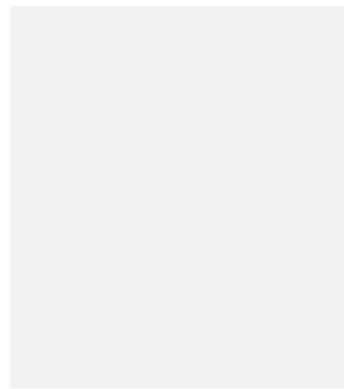
**Spinner**



**Placeholder**



**Solid Color**



**Progressive / blur**



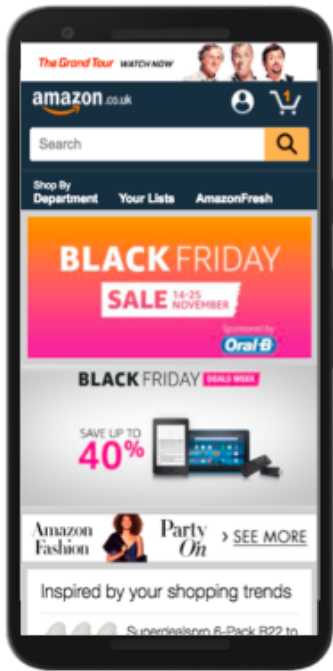


# Who

has a  
**slider on mobile?**



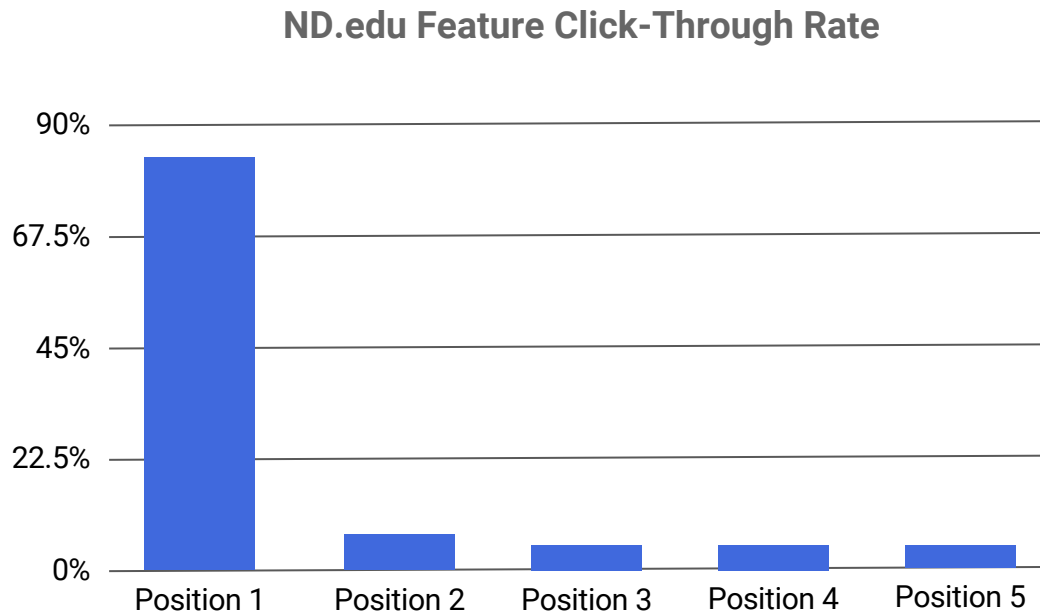
# Why removing sliders from mobile?



- Needs loading of many images and JS
- Low performance
- First screen collect most part of the clicks
- Movement causes user distraction
- Moving while reading causes user frustration
- Gives additional accessibility problems
- It seems an advertising banner



# The truth is, nobody clicks on the second image



# Why removing sliders from mobile?

4s

23s



3.5s

6.5s



## Fonts

Overusing fonts can slow down your website and scare your users away!

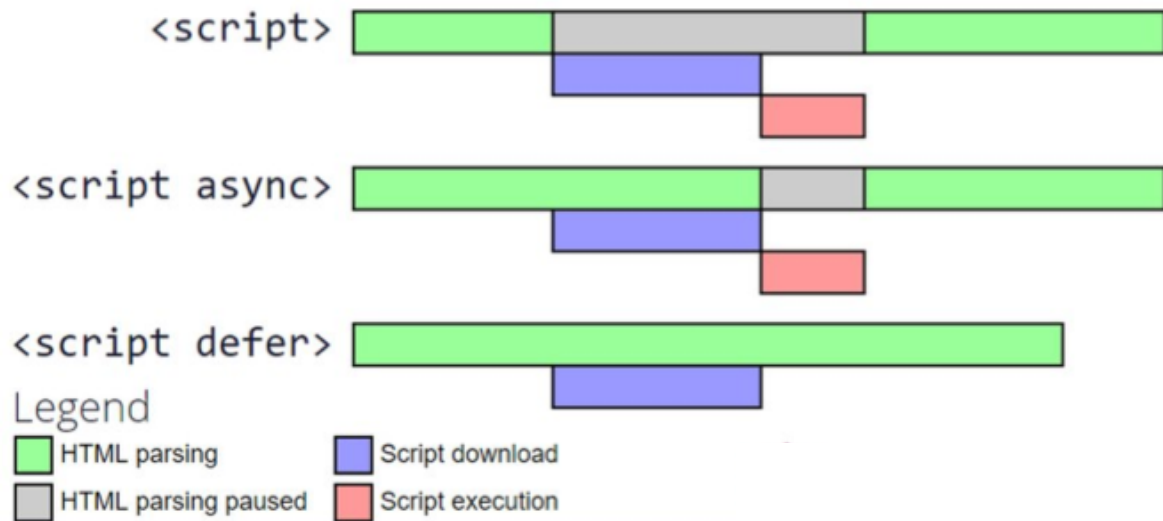


# How to optimize my JavaScript loading ?!



# Optimize your JS loading

Move the JS in the footer of your HTML (*as much as possible!*)



→ **Async** : if the script is standalone

→ **Defer** : if loading order matters



# How to optimize my CSS loading ?!





# Optimize CSS loading



`<style>` Inlined critical CSS `</style>`

`<script>` Load every other CSS file in async `</script>`



# Non-critical CSS async loading



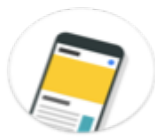
Technologies built  
with speed in mind:

## Accelerated Mobile Pages

# Load in <1 second



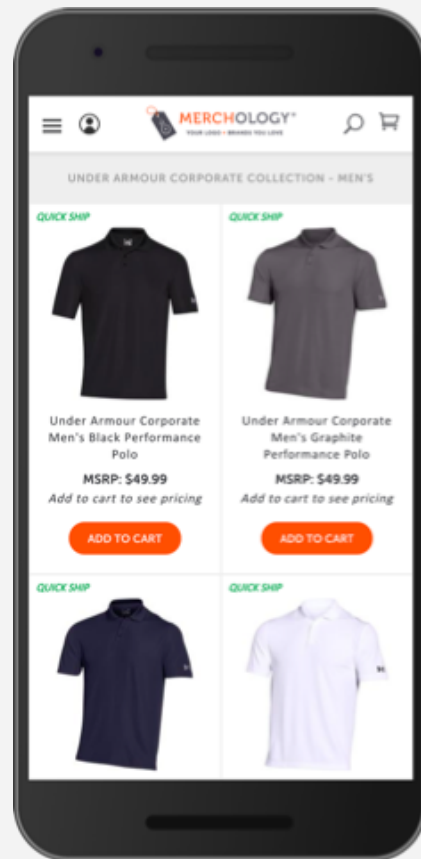
Lightning fast



Flexible and  
customizable



Easy to  
implement



<https://goo.gl/2BbGGh>

Thank you!



# Case Study - Szkla.com



# Case study: szkla.com

---



- Online store with contact lenses and glasses
- One of the industry leader in Poland
- Founded in 2004
- Based in Krakow



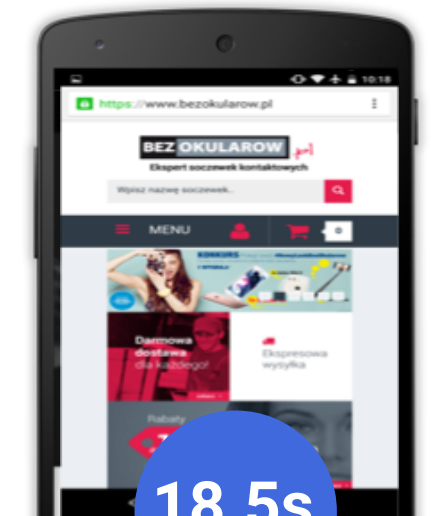
# Case study: szkla.com

---

- Over **45%** of traffic on the website comes from smartphones
- Page loading time on a smartphone: over **17.2 seconds.**
- Very poor conversion of the mobile site compared to desktop
- No completely responsive mobile site



# Page speed - benchmark



Bezokularow.pl



Kontaktowe.pl

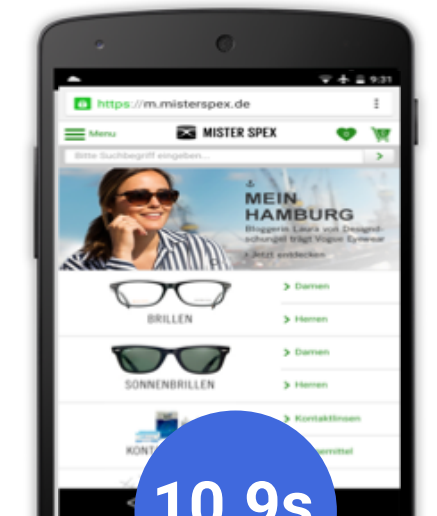


szkla.com

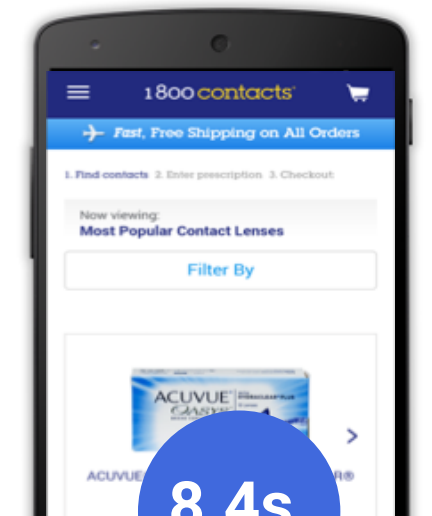




# Page speed - benchmark



misterspex.de



1800contacts.com



szkla.com



# Case study: szkla.com

---

## Solution to the speed problem:

- Implementation of full responsiveness
- Identification of elements blocking the page display
- Adjusting the volume of images on smartphones



# Case study: szkla.com

---

The speed of page loading after implementation of all changes recommended by Google

8<sub>s</sub>

Loading time: **Fair**

28%

Estimated visitor loss  
(Due to speed)



The following recommendations could reduce loading time by ~3 seconds.



## Case study: szkla.com

---

"Due to the fact that all pages of our website are responsive, we have seen a huge increase in conversion rate. Forcing users to zoom in on the screen by" tweaking "is a cardinal error in today's Internet world.

- Tomasz Serafin, CMO,  
Szkla.com



# Case study: szkla.com

---

**Solution to the problem of increasing orders via a mobile website:**

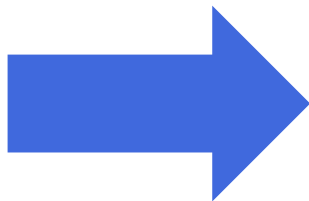
- Improvement of User Experience on the site
- Facilitation of efficient and quick order by the website or by calling the call center



# Mobile Website before and after changes



No possibility of calling directly from the website

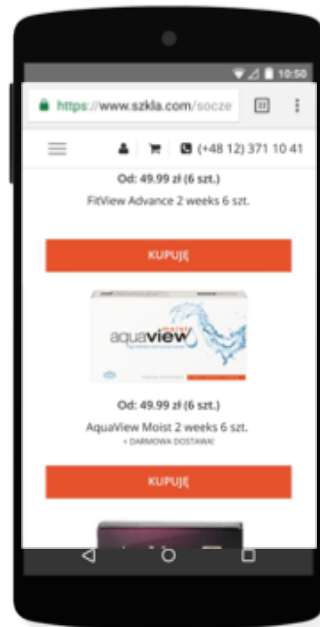
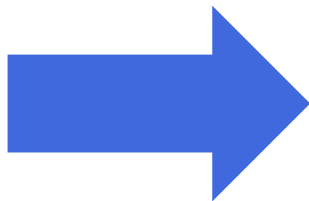


Two "floating" buttons with the possibility of calling

# Mobile Website before and after changes



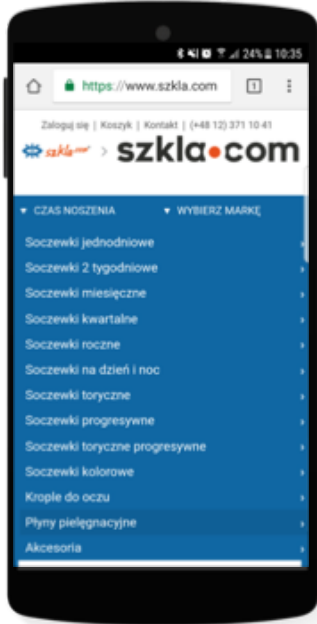
Inconvenient navigation through product categories



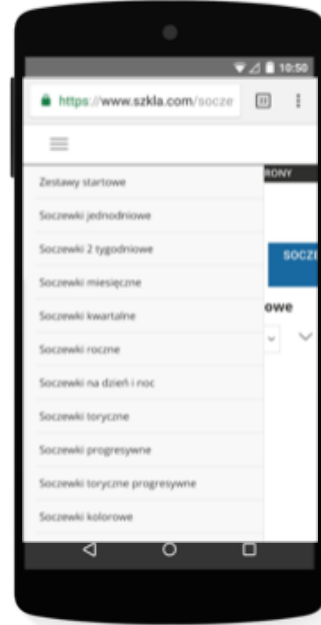
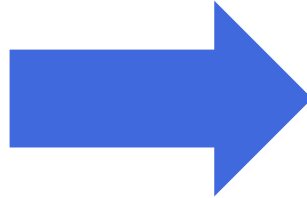
Large, easy-to-select panels with product descriptions.



# Mobile Website before and after changes



Inconvenient menu, with many sub-categories, covering most of the screen



Flat in structure, easy to navigate, pop-up menu

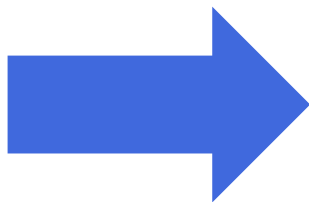




# Mobile Website before and after changes



Promotions that aggressively interrupt the purchase process (pop-up)



Promotions placed on a little aggressive banner



# Results after the implementation of changes

---

- Revenue from the mobile site increased by **60%** (year on year)
- Cross-device conversions have increased by **55%**



Thank you!



Coffee break

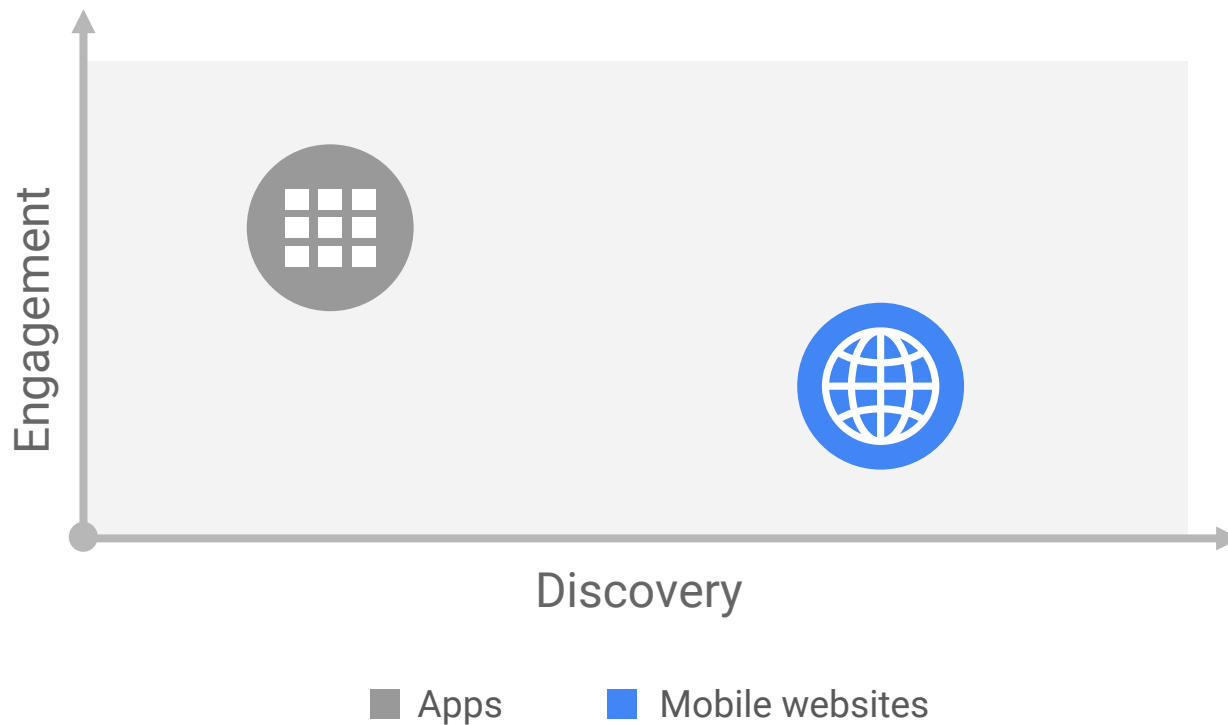


# What you can do to increase engagement on mobile assets?

Mariusz Gąsiewski



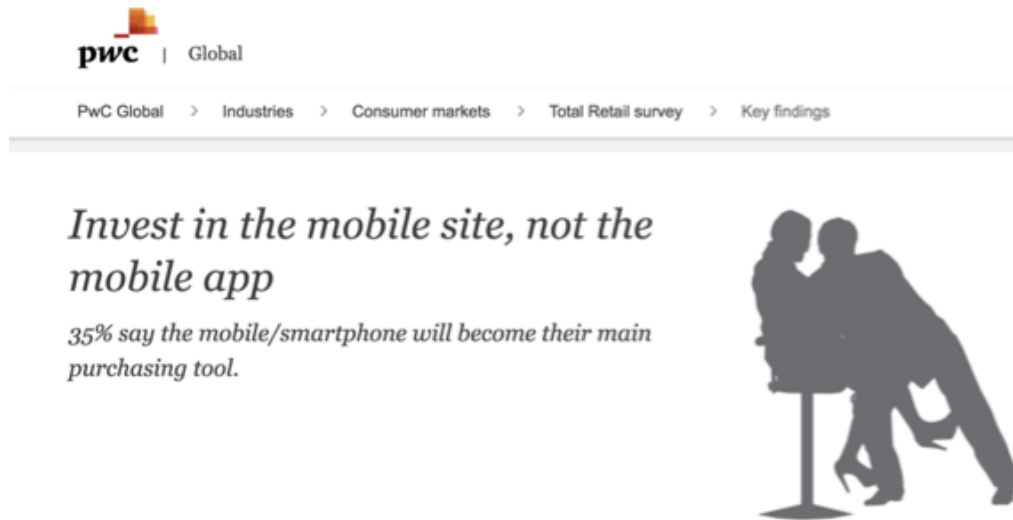
# Engagement vs Discovery



# Mobile website should be your priority

“Only the most loyal will go to the trouble to download and use it ... but when it comes to actually researching products, they prefer the mobile web.”

*Brendan Miller, principal analyst at Forrester*



Source: <https://www.pwc.com/gx/en/industries/retail-consumer/total-retail/total-retail-key-findings.html>

# Mobile website insights

**68%**

they do not need an app to learn about, browse or make purchases from a brand on their phone

**87%**

can be loyal to a brand without having the app on their phone

**63%**

when a brand forces them to download their app to access a deal, they will typically delete it shortly thereafter

Source: <https://www.pwc.com/gx/en/industries/retail-consumer/total-retail/total-retail-key-findings.html>





# Number of retail apps installed by US users, % respondents

	<b>April 2016</b>	<b>April 2017</b>
None	23%	22%
1 app	8%	12%
2 apps	10%	10%
3 apps	9%	12%
4 apps	8%	6%
5 apps	6%	6%
6-10 apps	21%	19%
11+ apps	16%	15%

*Note: ages 18+; numbers may not add up to 100% due to rounding*  
*Source: comScore Inc., "State of the U.S. Online Retail Economy in Q1 2017," May 10, 2017*

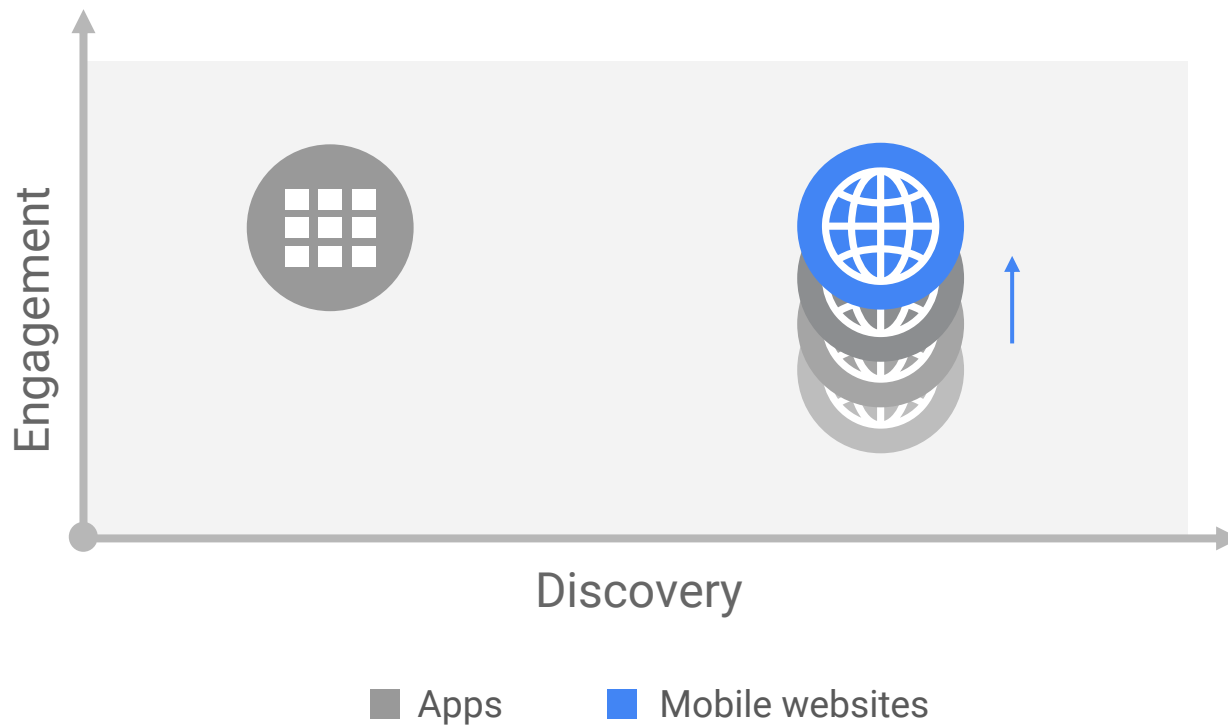


# Retention of some apps (leaders in their categories)

	D2	D7	D14	D28
Airline	28%	11%	5%	4%
Electronics	22%	12%	8%	6%
Travel/Hotels	20%	9%	5%	4%
Fashion	30%	16%	11%	9%
Bank	33%	26%	23%	20%
Gaming	51%	35%	27%	22%



# Engagement vs Discovery



# What web can do today?

<https://whatwebcando.today/>

**What Web Can Do Today**  
Can I rely on the Web Platform features to build my app?  
An overview of the device integration HTML5 APIs

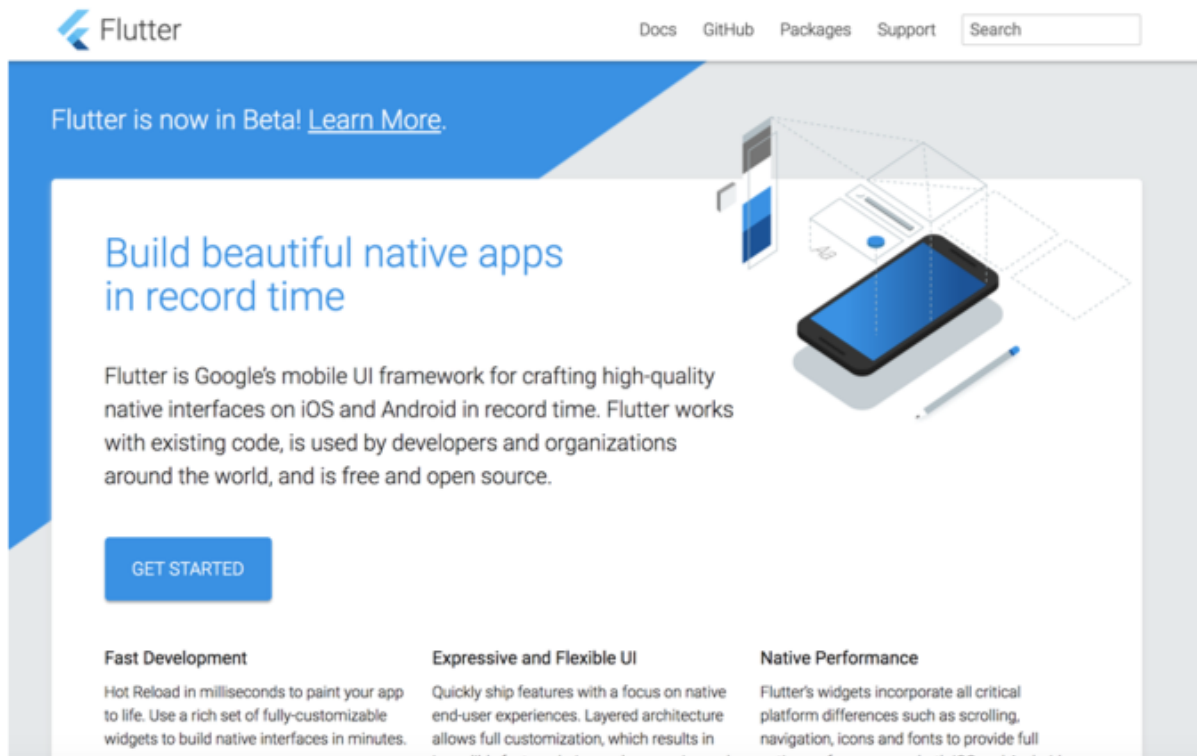
✓ Feature available in your current browser   ✗ Feature not available in your current browser

Native Behaviors	Camera & Microphone	Seamless Experience
LOCAL NOTIFICATIONS ✓	AUDIO & VIDEO CAPTURE ✓	OFFLINE MODE ✓
PUSH MESSAGES ✓	ADVANCED CAMERA CONTROLS ✓	BACKGROUND SYNC ✓
HOME SCREEN INSTALLATION ✓	RECORDING MEDIA ✓	INTER APP COMMUNICATION ✗
FOREGROUND DETECTION ✓	REALTIME COMMUNICATION ✓	PAYMENTS ✓
PERMISSIONS ✓		CREDENTIALS ✓

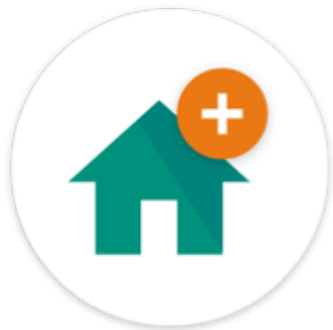
Surroundings	Operating System	Location & Position
BLUETOOTH ✓	OFFLINE STORAGE ✓	GEOLOCATION ✓
USB ✓	FILE ACCESS ✓	GEOFENCING ✗
NFC ✗	CONTACTS ✗	DEVICE POSITION ✓
AMBIENT LIGHT ✗	SMS ✗	DEVICE MOTION ✓
	STORAGE QUOTAS ✓	PROXIMITY SENSORS ✗
	TASK SCHEDULING ✗	

Device Features	Input	Screen & Output
NETWORK TYPE & SPEED ✓	TOUCH GESTURES ✓	VIRTUAL & AUGMENTED REALITY ✓
ONLINE STATE ✓	SPEECH RECOGNITION ✓	FULLSCREEN ✓
VIBRATION ✓	CLIPBOARD (COPY & PASTE) ✓	SCREEN ORIENTATION & LOCK ✓
BATTERY STATUS ✓	POINTING DEVICE ADAPTATION ✓	WAKE LOCK ✗
DEVICE MEMORY ✓		

# Check out Flutter if you are creating mobile apps



# Elements are missing on the web to drive engagement.



Add to Homescreen



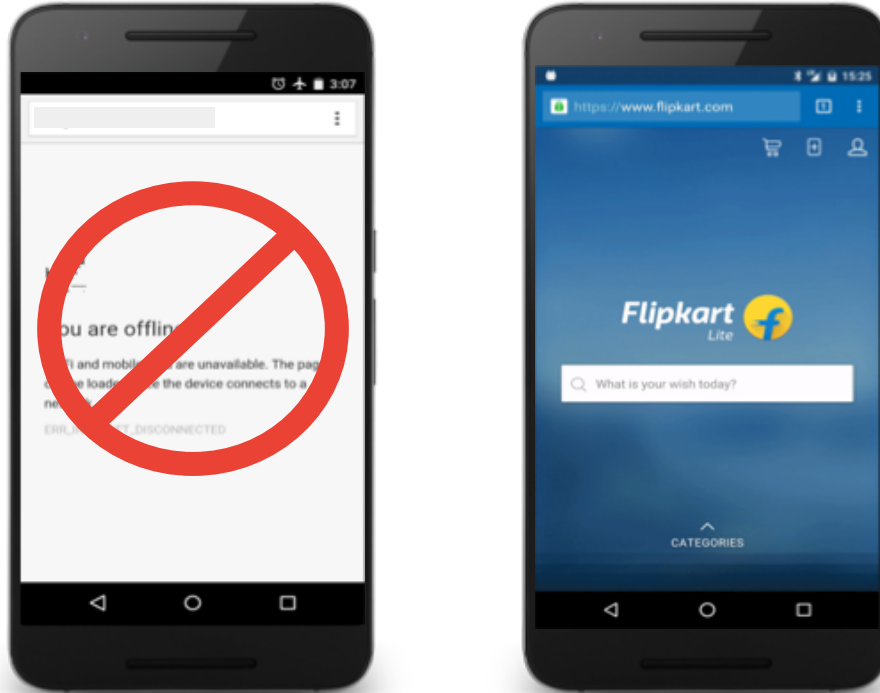
Push  
Notifications



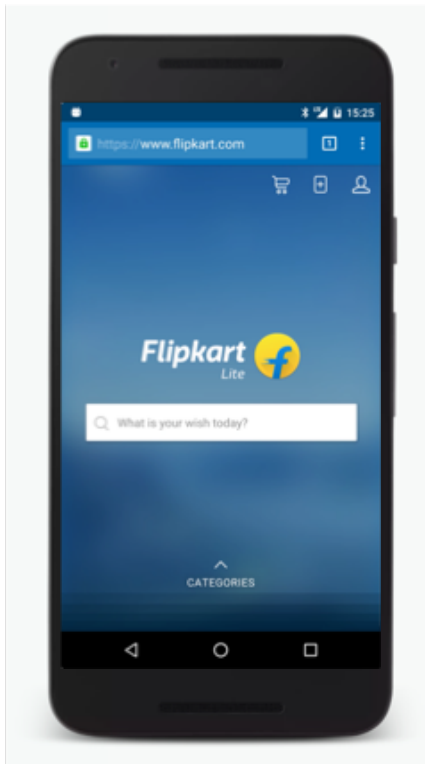
Reliable Performance



# Show content on flaky networks

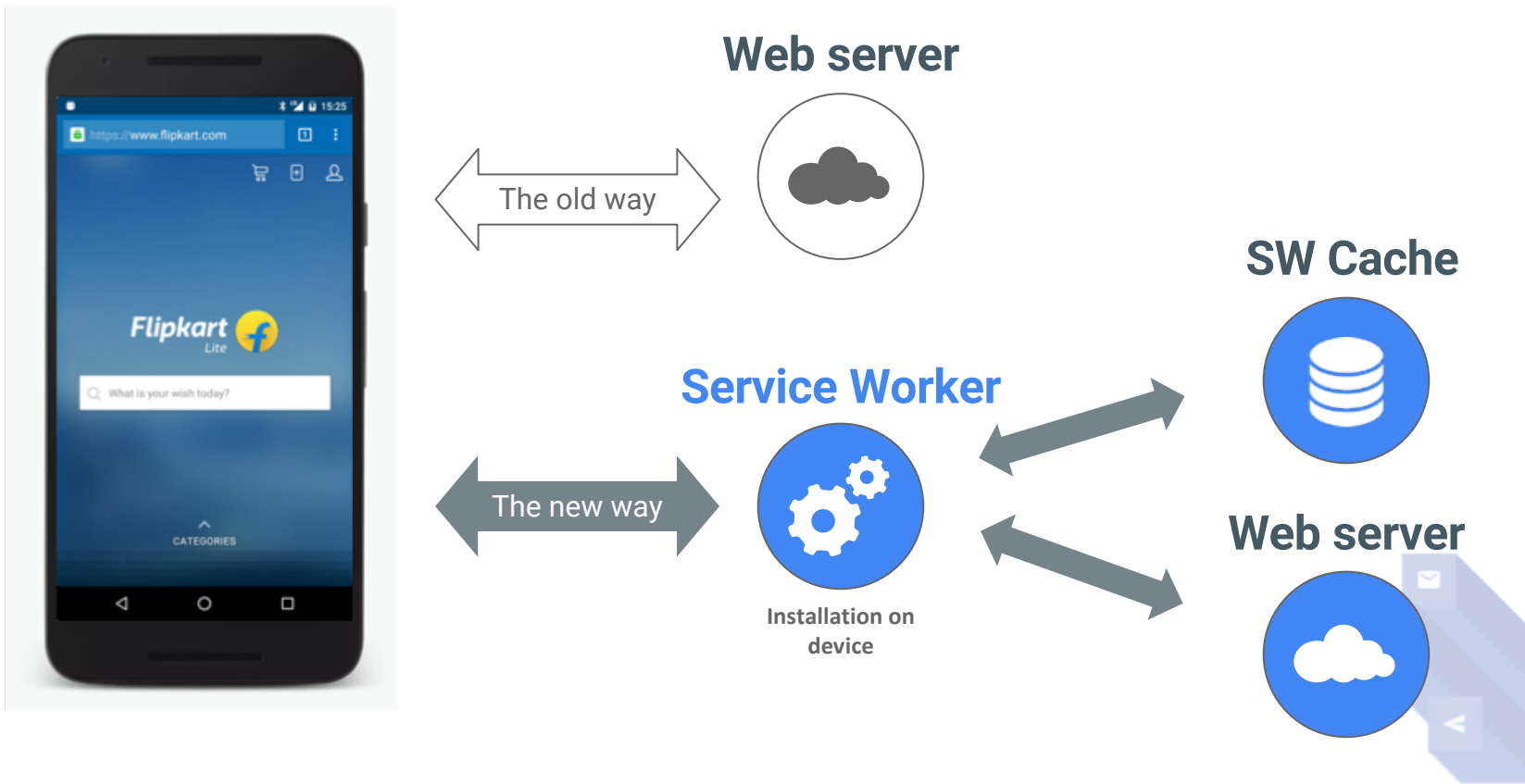


# Enable reliable experiences with Service Worker





# Enable reliable experiences with Service Worker



## First load



Slow\*  
(\*probably)



Service Worker activates  
after page load

## Second load

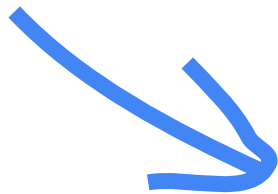


Fast\*  
(\*probably)



# PWA

***“Progressive”*** is the key to a Progressive Web App



*“You use it. You like it. And over time, you progressively build a relationship with it.”*

Alex Komoroske, Chrome Group Product Manager



# PWA technologies

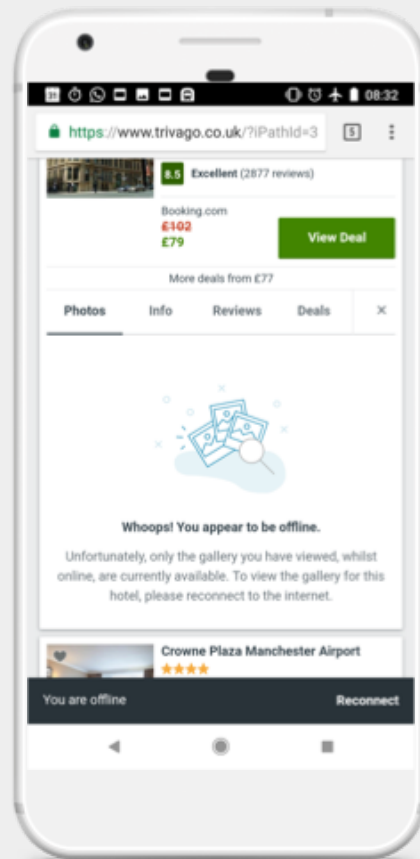
Required	Recommended Features
Service Worker	Push notifications
Web App Manifest	Advanced Offline Support
App shell caching	
Splash screen	
Smooth navigation	
“Progressive enhancement” with cross browser support	





[trivago.com](https://www.trivago.co.uk)

- 67% of users who are interrupted by a period of **offline** come back to browse
- 97% increase in conversion





[ele.me](https://ele.me)

- < 500KB page size
- Skeleton screens for perceived **speed**. Paints in 400ms
- TTI in 4.9 seconds on 1st load
- Service worker to pre cache critical resources





ele.me

*After we released the ele.me PWA, our loading times have dropped significantly, transforming our mobile web experience into one of the fastest food reservation sites in China.*

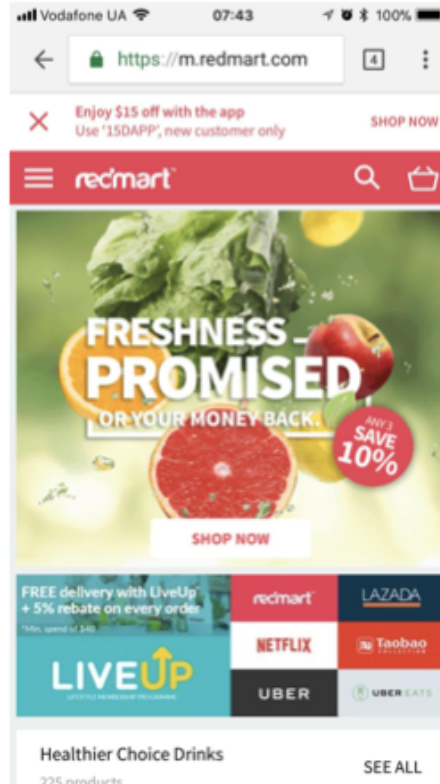
Spencer Yang, Product Manager of Ele.me PWA



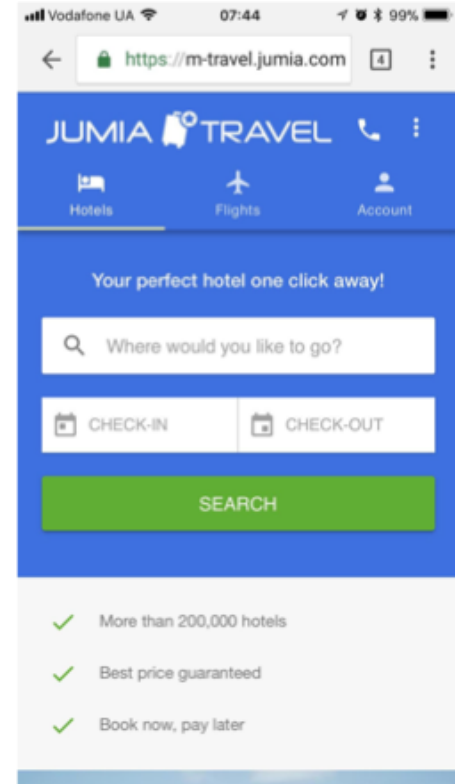
# PWA examples



Babista.de

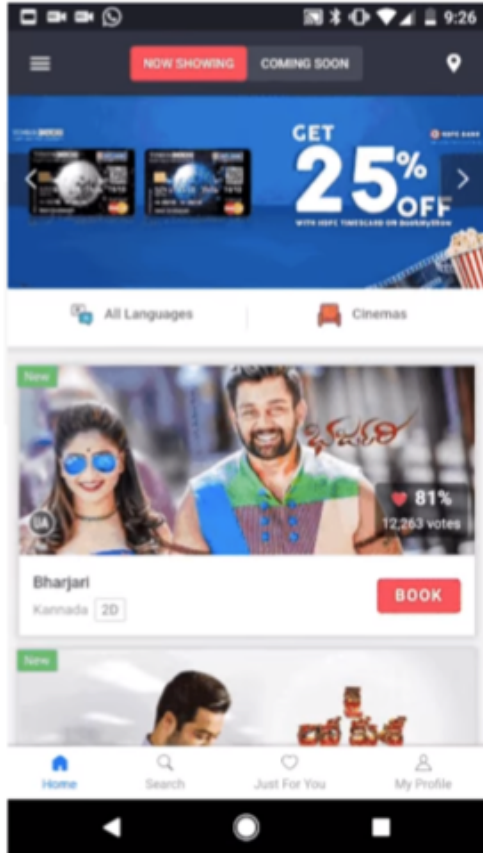


m.redmart.com





# BookMyShow case study



*“People were using the native app and were happy with it, but their main concerns were the data usage and the memory it consumes,[..]And if they uninstalled the app and tried using the mobile browser, it didn’t work the same way.”*

Anish Tripathi, Vice President of Design



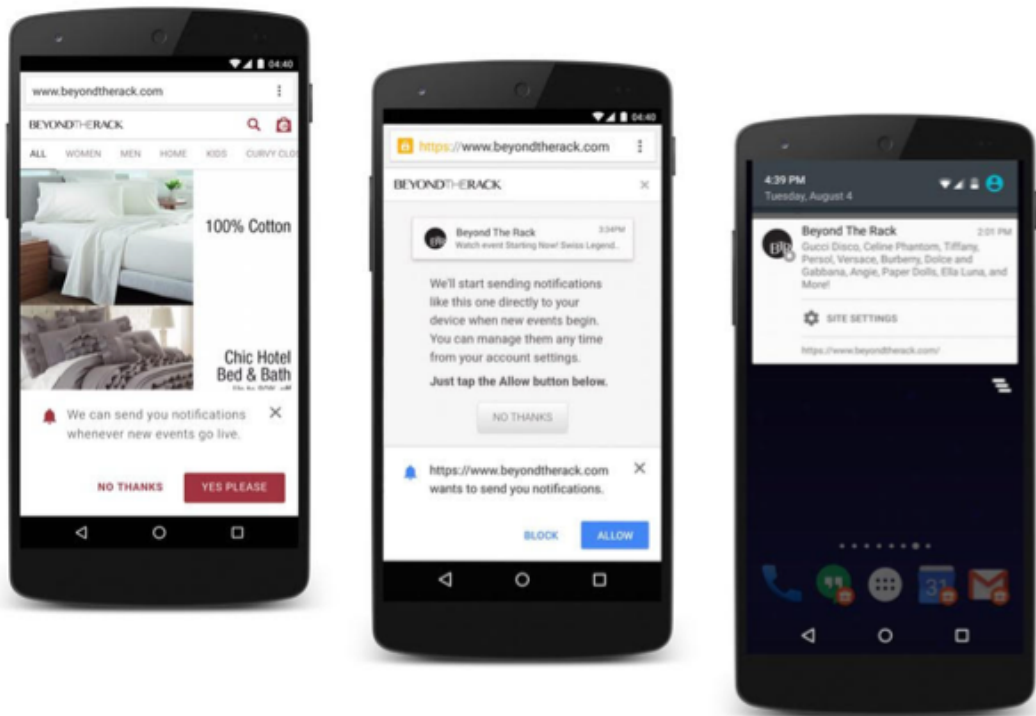
# BookMyShow case study



- 80%+ increase in their conversion rates.
- The size of the PWA is 54x smaller than the Android app and 180x smaller than the iOS app.
- The PWA takes less than 2.94 seconds to load (3G)
- ...and 4 seconds (2G)
- PWA enables checkout within 30 seconds.



# Send web push notifications



System level notifications, like apps

Ask to notify users with specific information

Can send notifications even when page closed





72%

increase in time spent for users  
visiting via a push notification

26%

increase in average spend  
per visit by members arriving  
via a push notification

+50%

repeat visits within 3 months

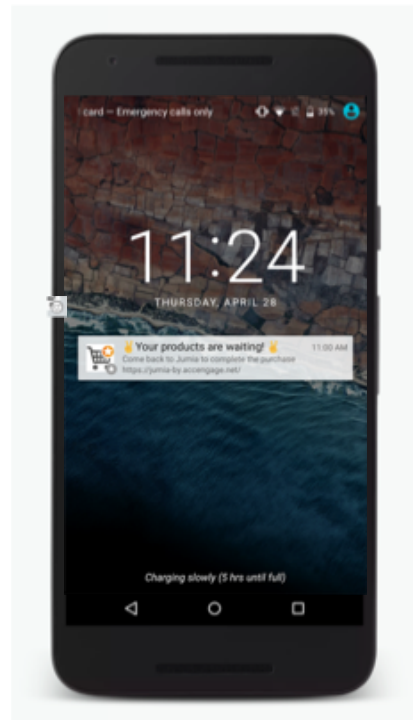


# Jumia has seen success with push notifications

Users that enabled push notifications made

**9X more**

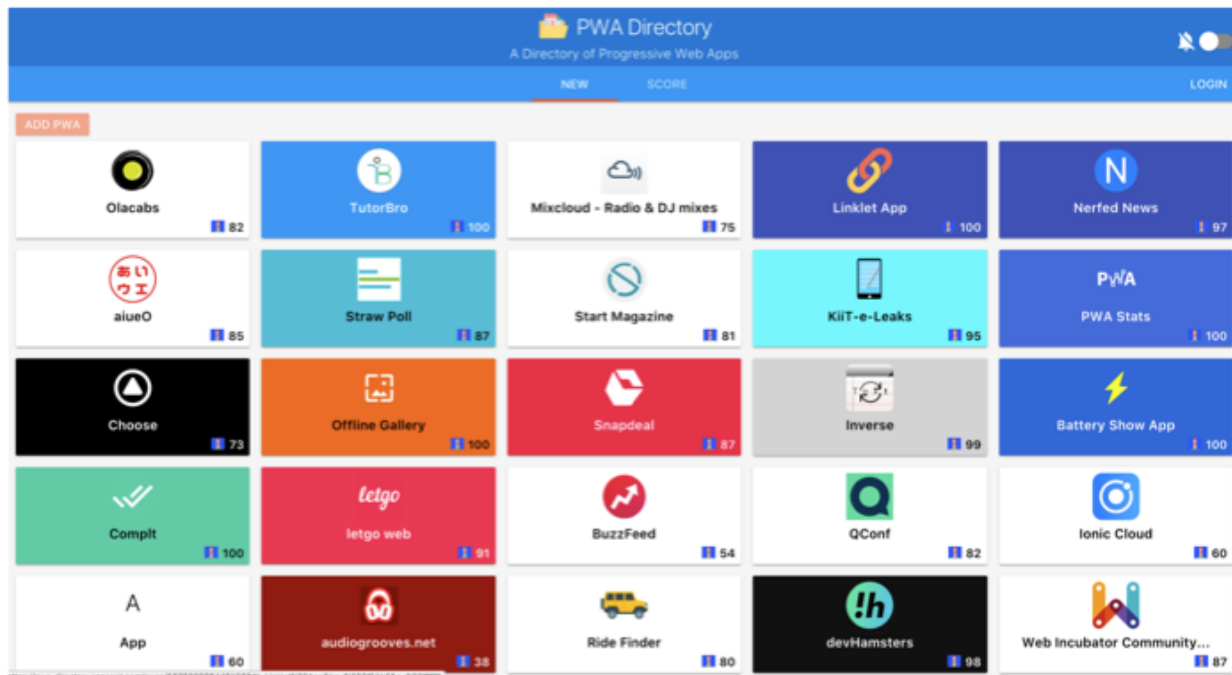
more conversions on previously abandoned carts





# PWA Directory

<https://pwa-directory.appspot.com/>



# PWAs are a cross-browser initiative







“PWAs ~~don't~~ work on iOS”

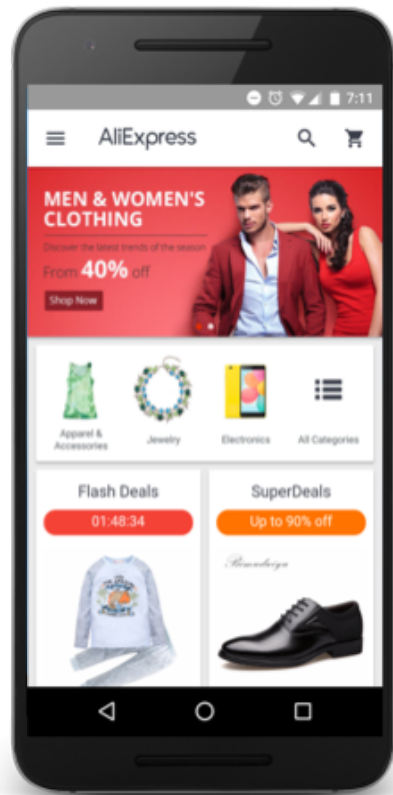
82%

higher conversion on iOS

and +104% across all browsers

74%

higher engagement across all browsers ('time spent')



AMP to start fast – PWA to stay fast

**A M P**

# How AMP and PWA complement each other

## AMP

Reliable, instant delivery

Optimized discovery

No Javascript

Static content

## PWA

First delivery can be slower

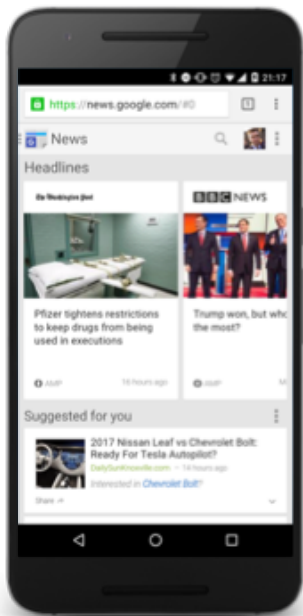
Not easily embedded

Access latest Web APIs

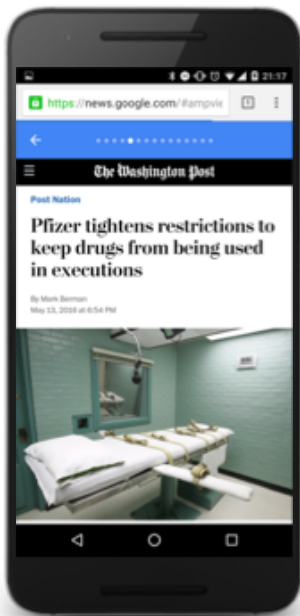
Support dynamic content



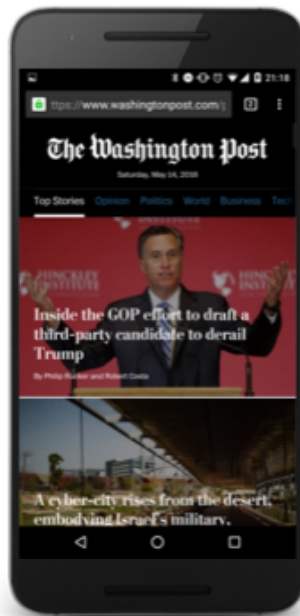
# AMP to PWA : Warm-up PWA using amp-install-serviceworker



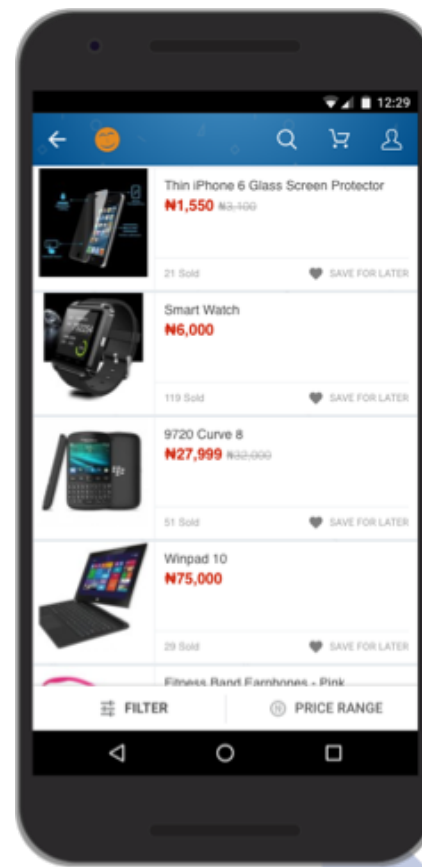
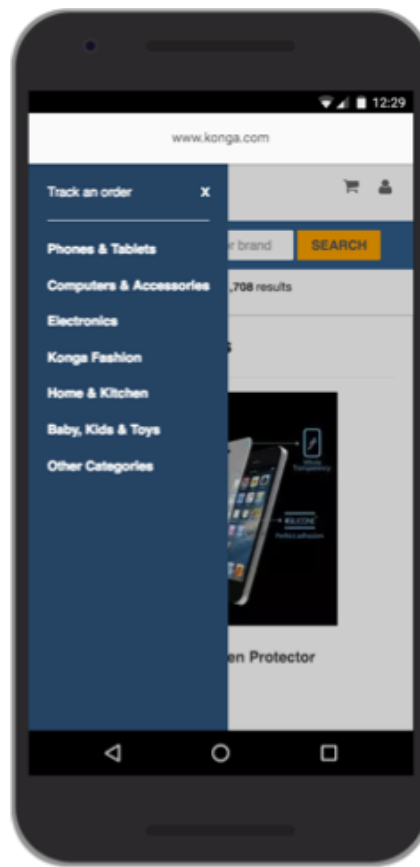
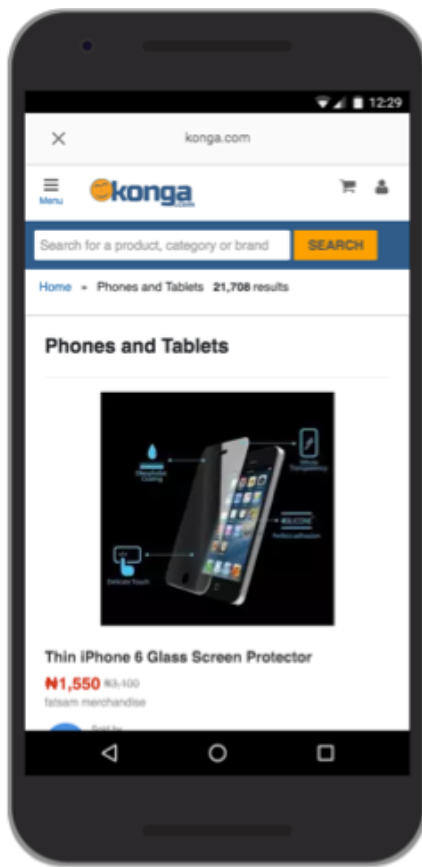
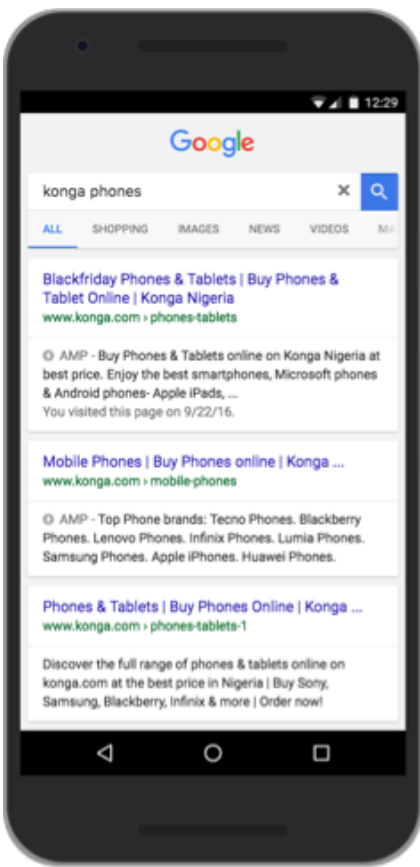
AMP loads instantly, and silently installs Service Worker to “warm up” PWA



`<amp-install-serviceworker>`



Once user navigates to site from AMP, content loads instantly



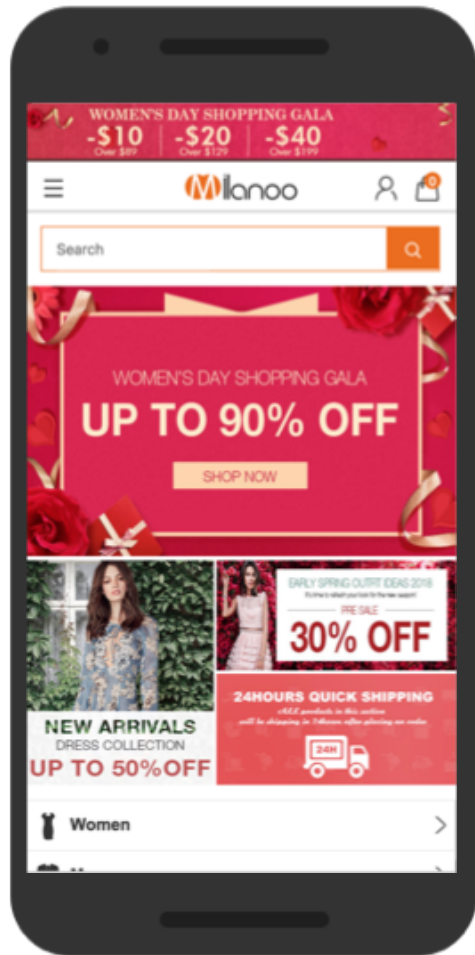
Accelerated Mobile Pages

# The AMP solutions

AMP helped Milanoo improve their user experience. We saw great experiment result with Milanoo by using AMP + AdWords.

*"The reason why we implemented AMP is that we want to give our users fast browsing experience and improve our ads performance."*

**Milanoo CTO, Peng Zhou**

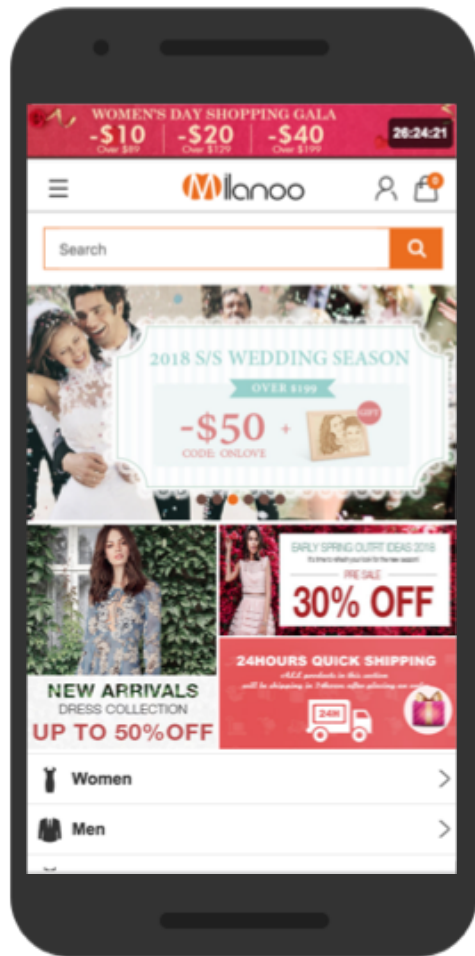


# The PWA solutions

Milanoo adapted all PWA components to help their mobile site improve conversions and user interaction.

*"We're trying to solve offline browsing issue with PWA offline cache and provide special experience when users offline. And with guiding users to add our service to home screen, it helps us build Milanoo brand awareness and lower the cost for marketing."*

**Milanoo CTO, Peng Zhou**



# AMP Results



**+26%**

Loading Speed

Milanoo saw loading speed +26% faster than original with AMP

**+5.1x**

mCvR

AMP + AdWords test result saw AMP landing's mCvR 5.1x higher than original.





# PWA results

*Add to Home Screen mCvR increase by 30% and bounce rate decrease by 12%*

*Credential Management API login success rate increase by 62% MoM*

*Payment Request API on credit card improved 3.9% payment success rate*

**+10.5%**

mCvR

Milanoo mCvR increased  
10.5% after PWA launched

**- 64.6%**

Bounce Rate

Bounce Rate drop 64.6%  
after PWA launched



# AMP + PWA

## Few easy steps

- Implemented AMP for speed improvement
- Enabled Manifest and Service Worker for Add to Home Screen and Offline Cache
- Adapted credential management api for user register and login
- Implemented Payment Request API for credit card users

**+10.5%**  
mCvR

*“Launching AMP/PWA has greatly improved all our metrics and provided a better user experience.  
Thanks Google for offering such an amazing technology.”*



















✓ Live

✓ Public Beta <sup>1</sup>



Expected future launch

							
AMP	✓	✓	✓	✓	✓	✓	✓
Service worker / offline	✓	✓ iOS 11.3	✓	✓ 17	✓	✓ 11.1	✓ 11.3
Add to homescreen	✓		✓		✓		✓ 11.3 <sup>2</sup>
Push notifications	✓		✓	✓ 17	✓	✓	
Credential Management API	✓						
Google One-tap Sign-up / Auto Sign-in	✓	✓	✓	✓	✓	✓	✓
Payment Request API	✓			✓		✓ 11.1	✓ 11.3
Google Pay All major browsers by EOQ1	✓						

**Please note:** This matrix may not reflect the latest updates for third-party browsers, and should not be used as the “source of truth”. Please consult each browser for up-to-date and accurate feature support.

<sup>1</sup> “Public beta” may refer to any upcoming browser / OS release, preview version, or flag-enabled feature

<sup>2</sup> No automatic prompt

# What web can do today?

<https://caniuse.com>



“By 2020, Progressive Web Apps will have replaced 50% of general-purpose consumer facing apps.”

/ Gartner Research

Would you like to see your website as a PWA?



Thank you



# How to increase conversion rate and retention with Google Pay?

Grygorii Krutii





Billions of people already use Google.  
Now they can use it to pay you.

---



Hundreds of millions  
of cards on file



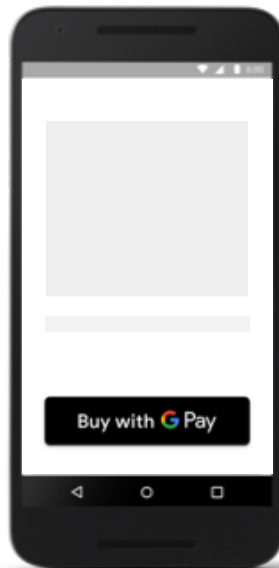
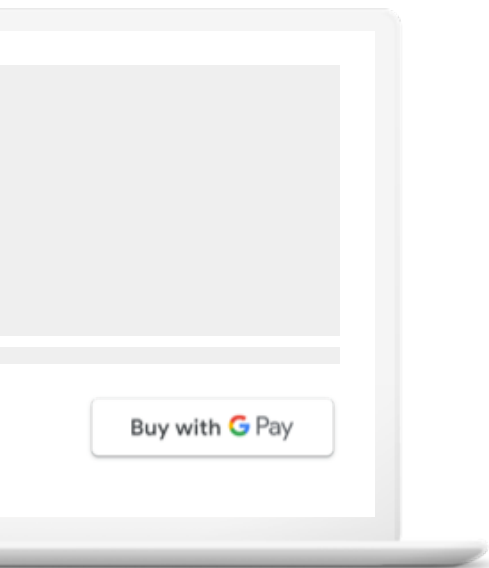
Saved to Google  
Accounts



Ready to pay



# Pay online, in store, & across all Google products



# Global customer reach at Google scale

With Google Pay, it's easy for your customers to use the payment information saved in their Google Account, on Android & iOS, from anywhere.

 **Cross platform & multiple browsers**

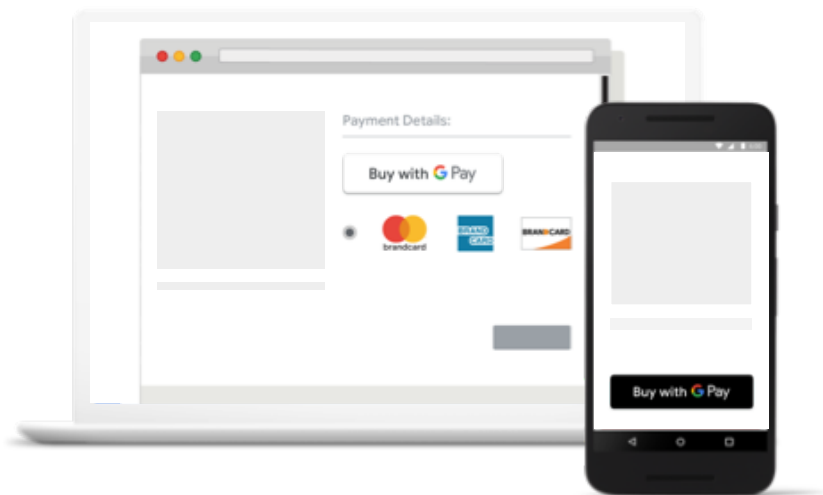
 **Google Assistant ready**

 **Worldwide**



# A better way to pay

- 📱 Logged in and ready to pay
- ✓ One API that enables web & app
- 🕒 Fewer than 10 lines of code
- 🌐 Available globally
- 👉 Checkout in a few clicks
- 👥 Higher conversion rates
- ⚡ Future proof
- 💰 No fees



## Supported Payment providers (PSP)

ACI UNIVERSAL PAYMENTS.

adyen

Braintree

EBANX PAYMENTS

FirstData.

Groupe Paysafe

stripe

vantiv.

worldpay

Google

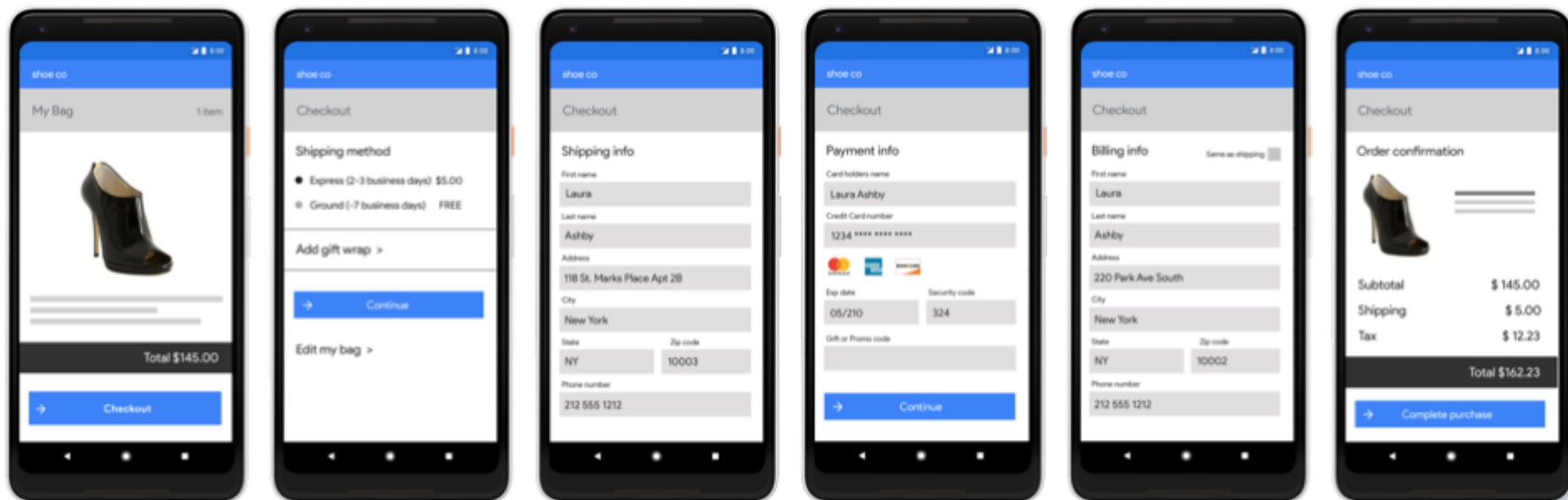


**69% abandon a site or app  
because there are too many  
steps to purchase.**

**“Checkout is the last opportunity  
a retailer has to make a positive impression  
on a shopper. ”**

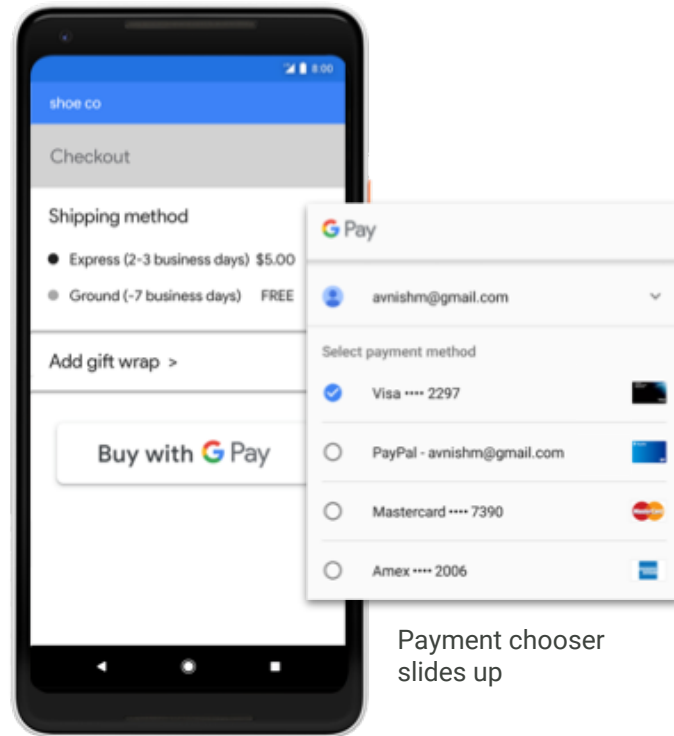
Larry Logan, CMO of Digimarc

# Current checkout experience



\*Illustrative only

Now checkout in just a few clicks with Google Pay



Payment chooser  
slides up



# Live merchants



Retail



Travel



Food Delivery



Entertainment

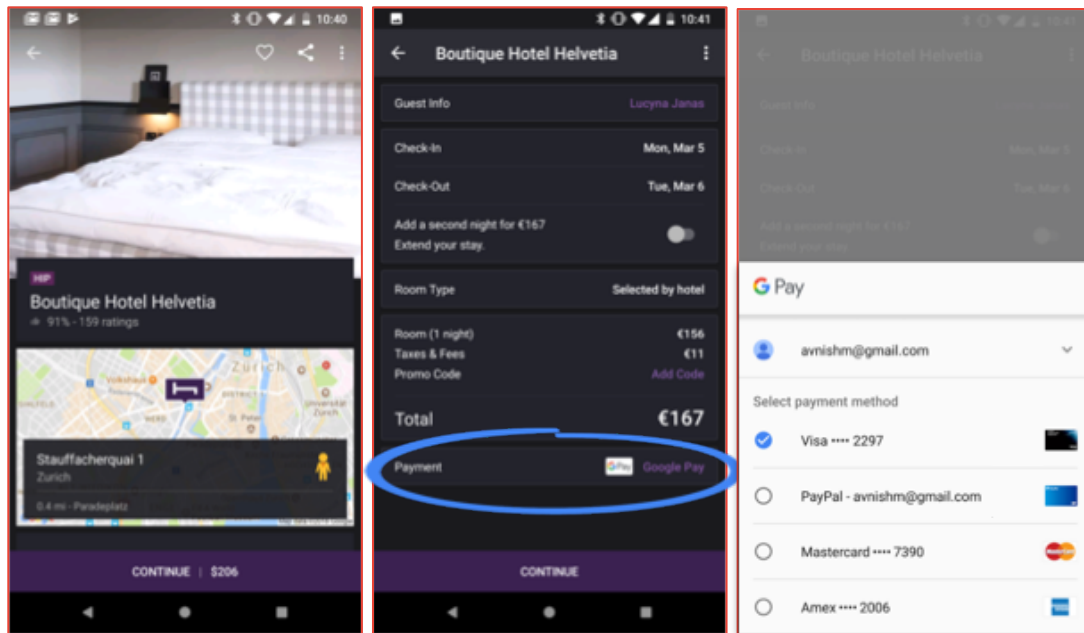


# What our partners are saying

## Conversion Uplift

Customers who had Google Pay selected as their payment type were **65% more likely to complete their booking flow.**

-HotelTonight



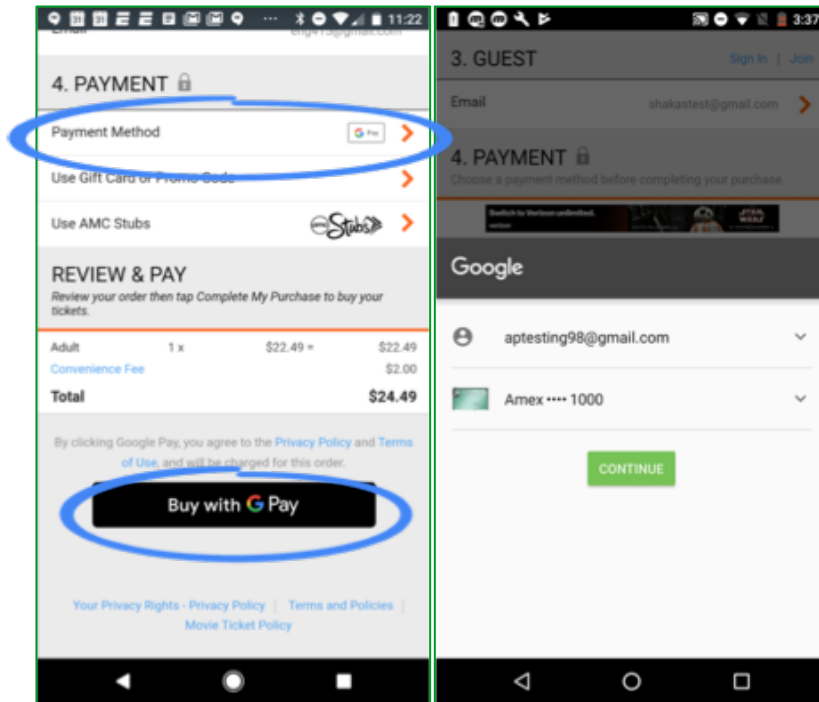
Default payment option for returning users

# What our partners are saying

## Customer Retention

We've found sustainable Google Pay growth with its **share of Android App orders up 30%** weeks after our promo ended.

-Fandango

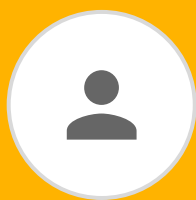


Default payment option for returning users

# Payment Request APIs

# Google has hundreds of millions of cards on file

Your customers already use our products. Now they can use them to pay you. When customers pay with Google, they can use any of the credit or debit cards they've added to their Google Account from products like **Google Play, YouTube, Chrome** or **Android Pay**.



It starts with  
Google Users



who transact on  
Google Properties



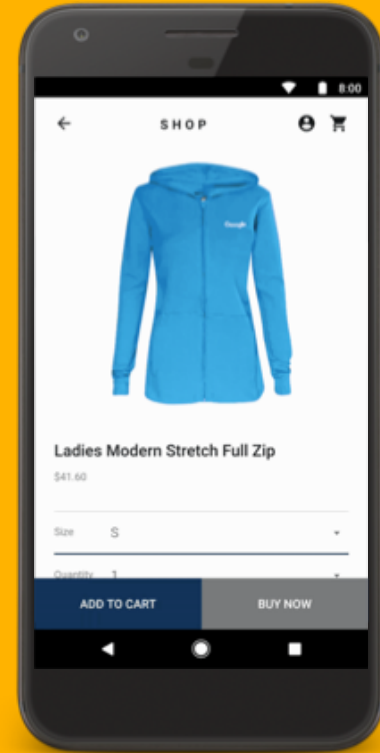
and save their credit and  
debit cards to their  
Google accounts



which we securely  
access to enable  
streamlined  
checkout on your  
website or app.

# GOOGLE PAYMENT API IS THE FOUNDATION

- Forms of payment associated with users' Google accounts
- Includes credit and debit cards, Android Pay tokens, and more coming soon
- Onmichannel: in-store, in-app, & online

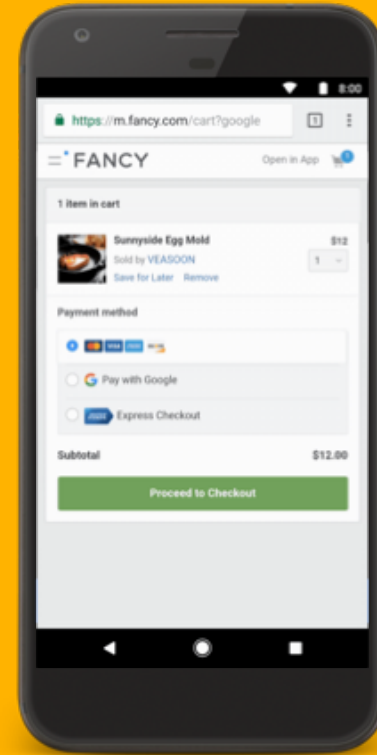


## TWO WAYS TO IMPLEMENT

- ❖ Branded button
- ❖ Generic checkout

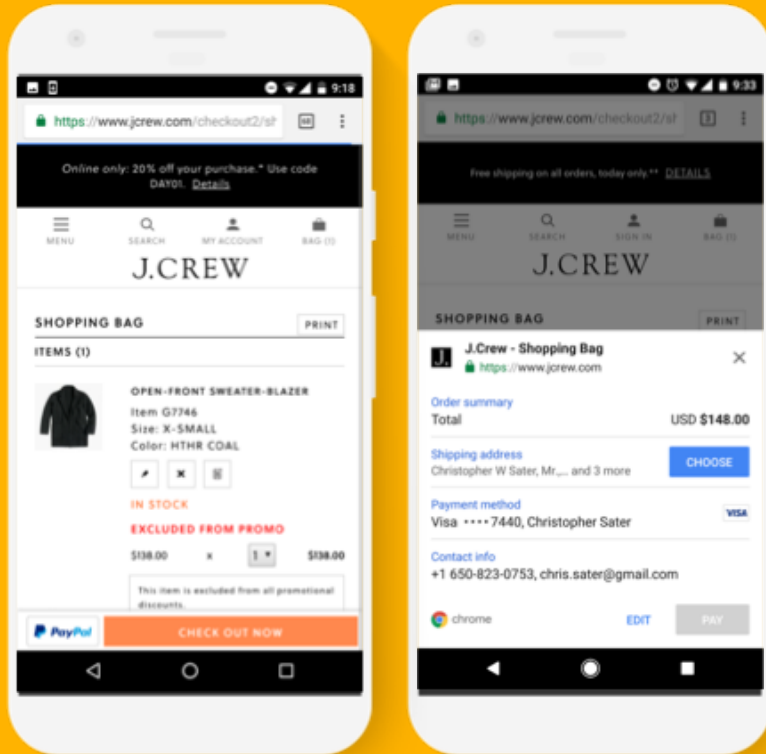
# BRANDED BUTTON CHECKOUT FLOW

- Clear call to action button
- User trust on unfamiliar merchants
- Can be done in as few as 3 clicks!





# GENERIC CHECKOUT FLOW



- Always called as part of standard checkout
- Includes dynamic pricing based on tax and shipping

## EXISTING PARTNERS

*J.Crew*    The Washington Post

kogan.com

OR TRY OUR DEMO: [HTTPS://POLYKART.STORE](https://polykart.store)  
developers.google.com/payments

# The future of commerce

A smart speaker with a white top and grey fabric mesh bottom sits on a rustic wooden table. To its right are two stacked books and two modern, metallic silver vases. In the background, a light-colored sofa is visible against a neutral wall.

# OK Google!

---

With one API you're already ready for whatever payment innovation is dreamt up next.

**The Google Assistant  
now runs on over 400  
million devices**



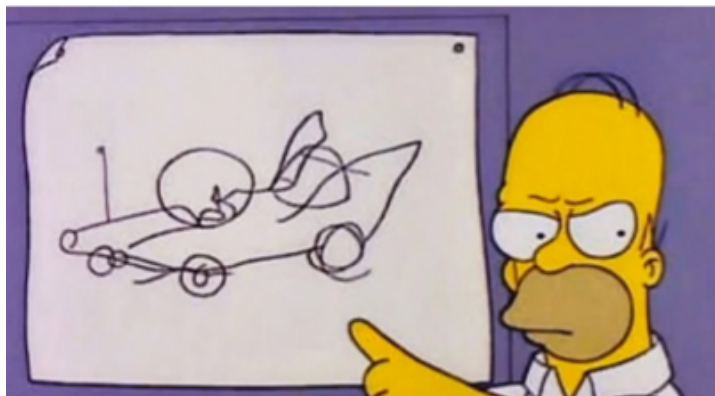
Thank you



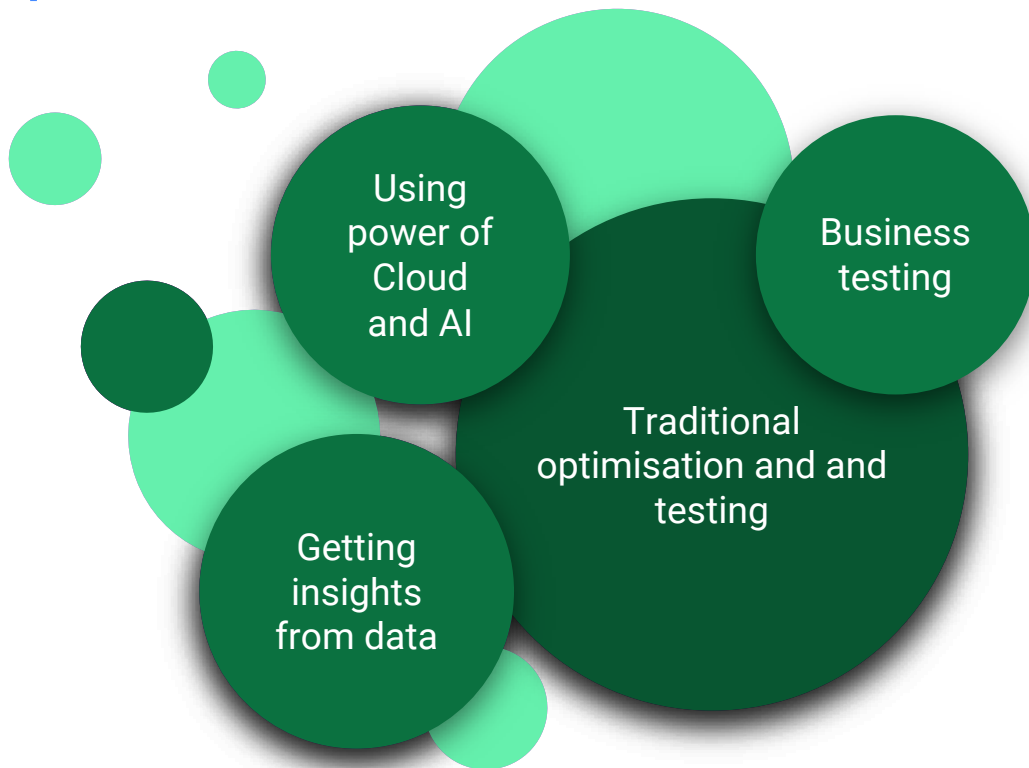
# Assets optimisation and testing on Mobile for retail companies.

Mariusz Gąsiewski

# Optimisation is not easy...

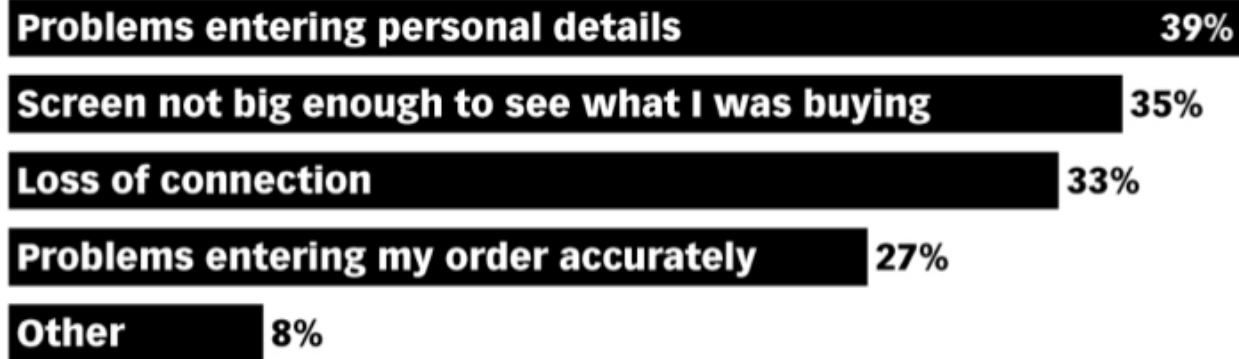


# Testing and optimisation on Mobile





# mCommerce issues that resulted in cart abandonment according to digital buyers in Germany, the UK and US, Nov 2017 - (% of respondents)



*Note: ages 18+*

*Source: Addressy, "Fixing Failed Deliveries: Improving Data Quality in Retail" conducted by Loudhouse, Dec 5, 2017*



# Mobile Site Benchmark 2018

## Retail

1	Coolblue* (BE)	83%
2=	Bokus (SE)	78%
2=	Coop (DK)	78%
2=	Leroy Merlin* (FR)	78%
5=	GittiGidiyor (TR)	77%
5=	Litres (RU)	77%
5=	Namshi (AE/SA)	77%
5=	NetOnNet (SE)	77%
9=	Modanisa** (TR)	76%
9=	Morhipo** (TR)	76%
11-60		71%
61-181		67%

## Travel

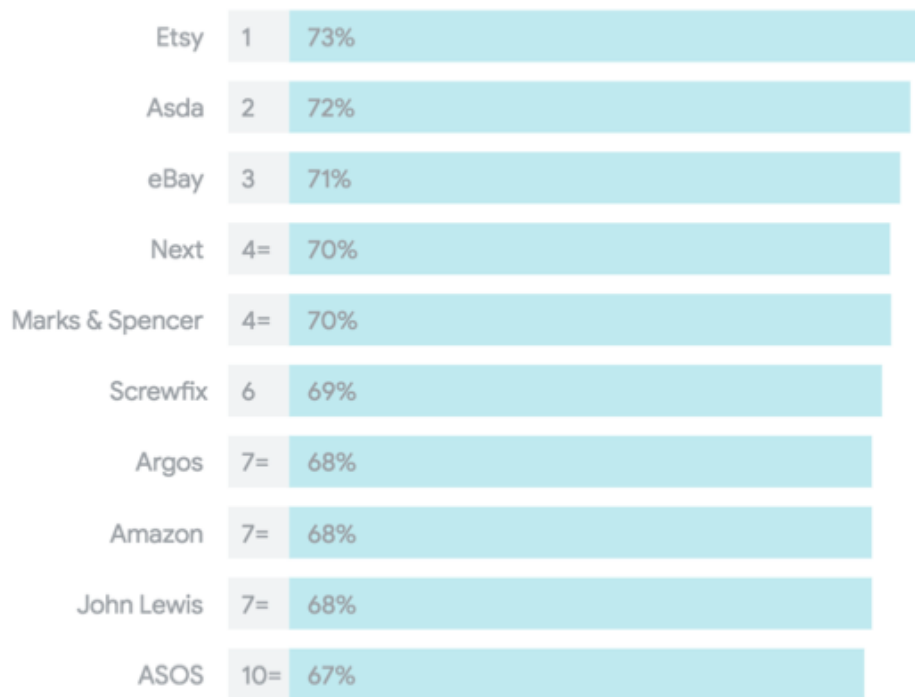
1	Booking.com* (DE)	88%
2	Swebus (SE)	87%
3	Saudia (AE/SA)	86%
4	SAS (SE)	85%
5=	Etstur (TR)	84%
5=	Kayak* (ES)	84%
5=	Lufthansa (DE)	84%
5=	NS International (NL)	84%
9=	Air France** (FR)	83%
9=	Lastminute.com** (FR)	83%
11-60		78.5%
61-122		68%

## Finance

1	Bank Norwegian (NO)	96%
2	Garanti (TR)	91%
3=	AIG (IL)	89%
3=	Linea Directa (ES)	89%
3=	Storebrand (NO)	89%
6=	Crédit Agricole (FR)	87%
6=	Confused.com (UK)	87%
8	SBAB (SE)	86%
9=	ING DiBa** (NL)	85%
9=	uSwitch** (UK)	85%
11-60		80.5%
61-160		63.5%

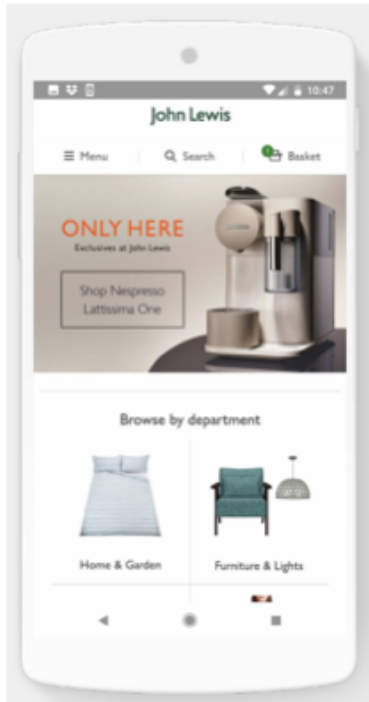


# Mobile Site Benchmark 2018 - UK Retail Top 10

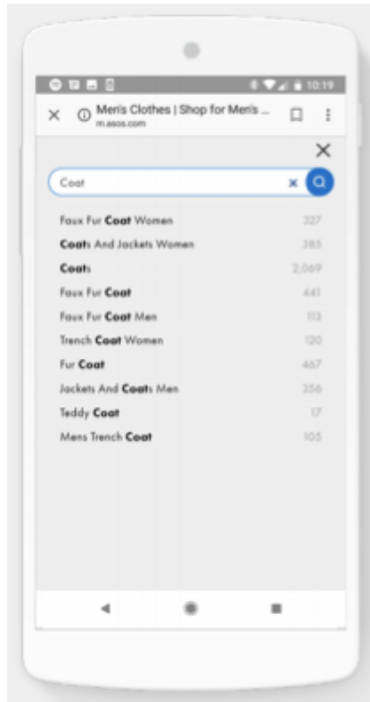


# Mobile Site Benchmark 2018 - UK Retail Top 10

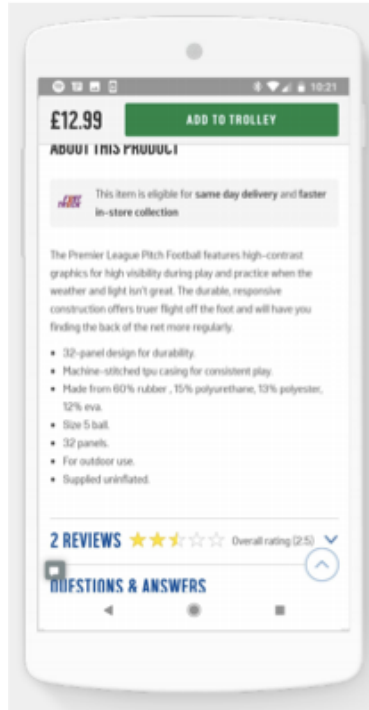
Mobile design



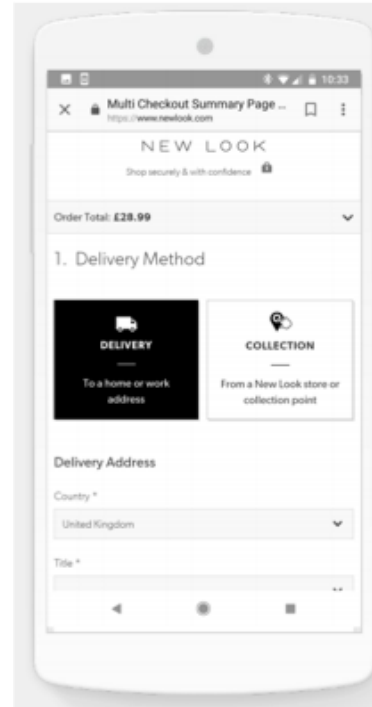
Finability



Product pages



Conversion



# Brands score higher when there has been a company-wide policy to improve mobile experience

*"With the vast proportion of our visits coming from mobile devices, ASOS is a well and truly mobile first business.*

*Over the last 12 months we have really been focusing on improving our customer experience by improving the site design and improving performance.*

*We have made some great headway and this is now embedded as part of everything we do."*

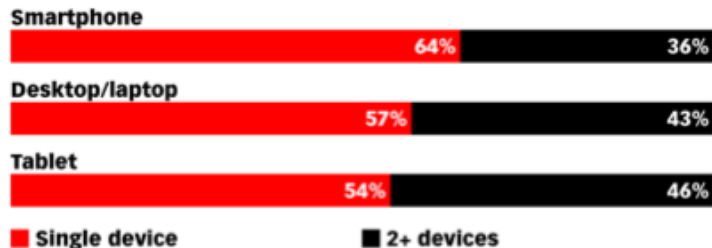
- Andy Mills - Web Platform Lead, Asos



# Cross-device effect is rising. You need to reflect it in your assets and measurement strategy

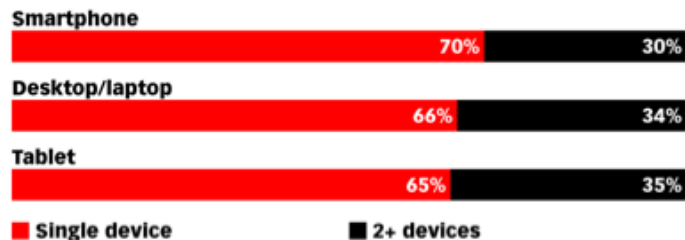
## Multidevice Share of Ecommerce Transactions in Australia, by Primary Device, Q4 2016

% of total



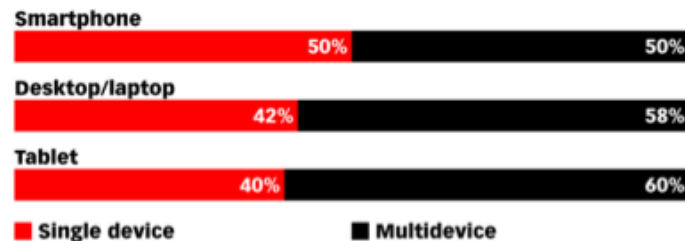
## Multidevice Share of Ecommerce Transactions in Germany, by Primary Device, Q4 2016

% of total



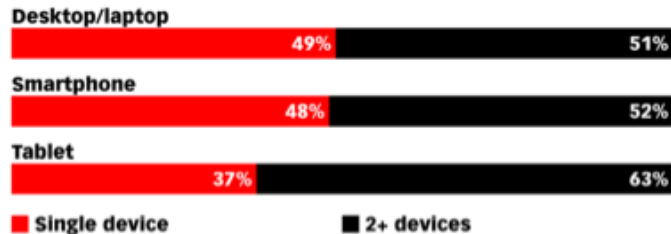
## Multidevice Share of Retail Ecommerce Transactions in Japan, by Primary Device, Q4 2016

% of total



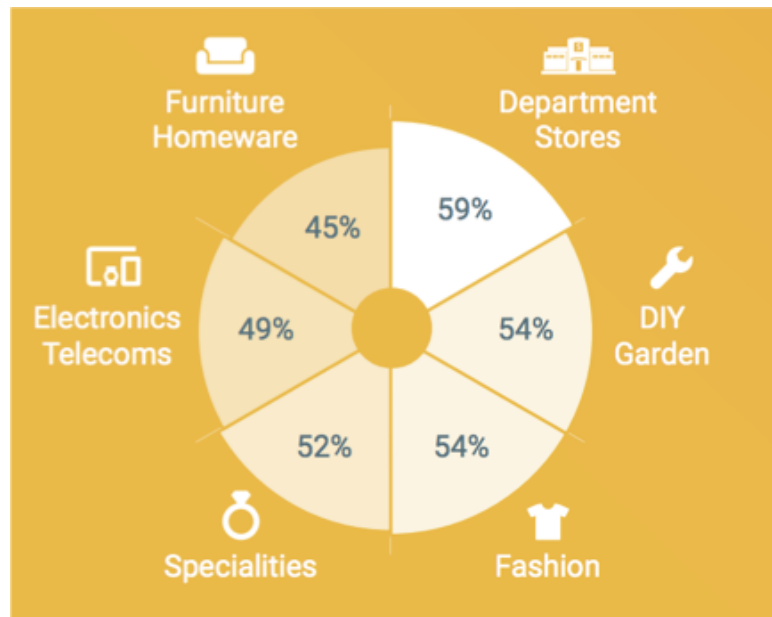
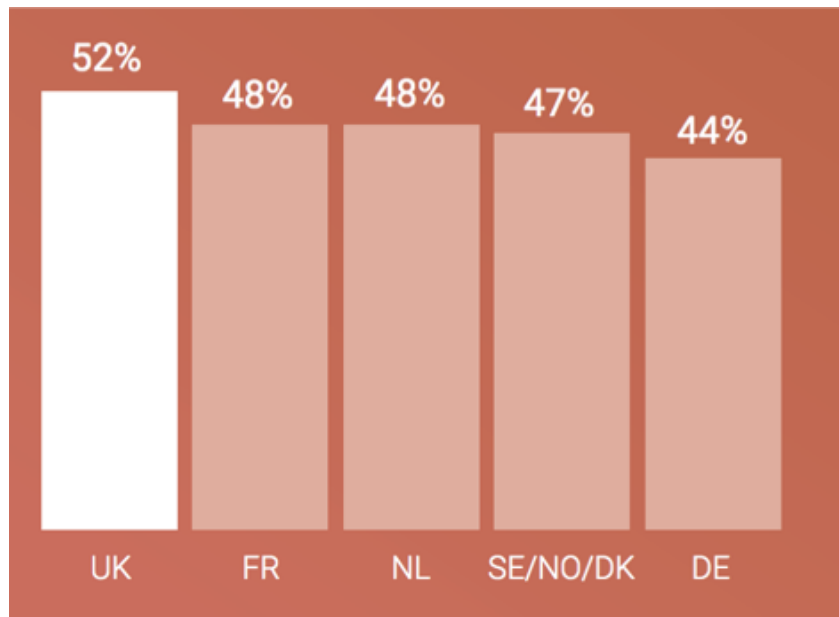
## Multidevice Share of Ecommerce Transactions in South Korea, by Primary Device, Q4 2016

% of total

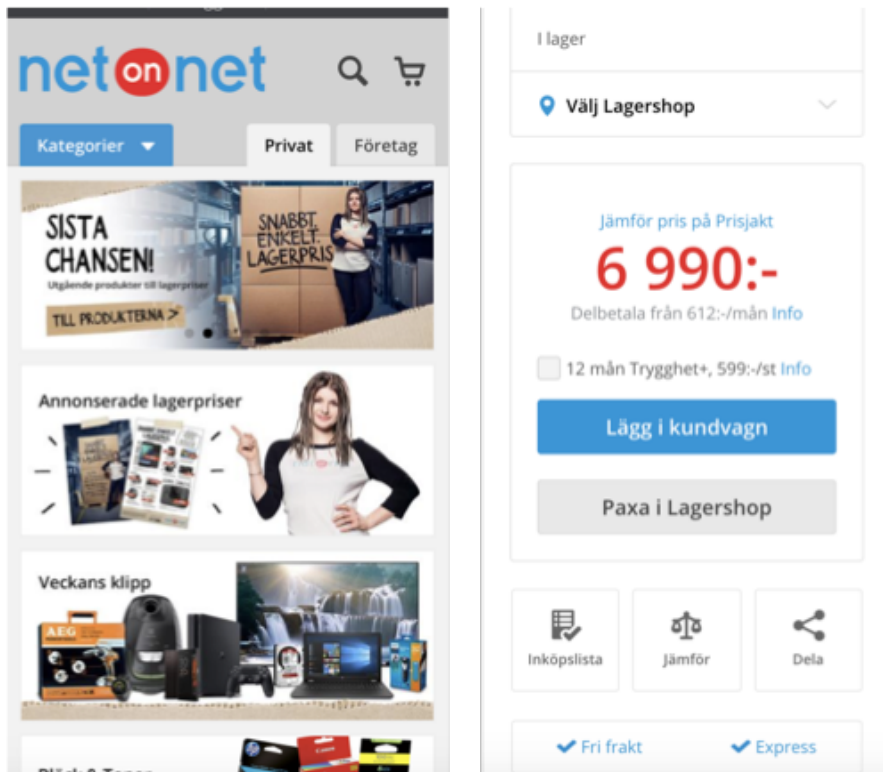


# Learn from best examples: Google's Omnichannel Customer Experience Review.

Average omnichannel CX score



# Average omnichannel CX score

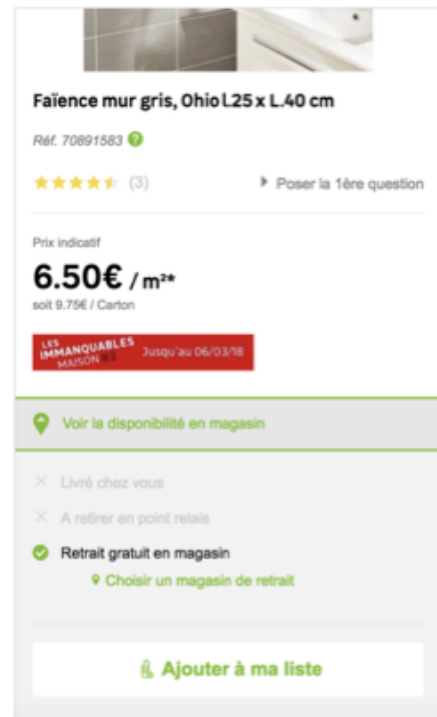


- Wish-lists and shopping baskets are synced to a customer's account and immediately available across devices.
- Gift cards can be bought and redeemed both online and offline and card balance can easily be checked and increased.
- NetOnNet's loyalty program allows members to claim offers in-store and online.



# Average omnichannel CX score

- Product availability (online i offline)
- Filter based on availability
- All possible fulfilment options clearly listed on product pages



Źródło: Google's Omnichannel Customer Experience Review



In Good we believe ....

anything else

....we need to test



# Technologies used by client-side marketers worldwide to implement website personalization - (% of respondents)

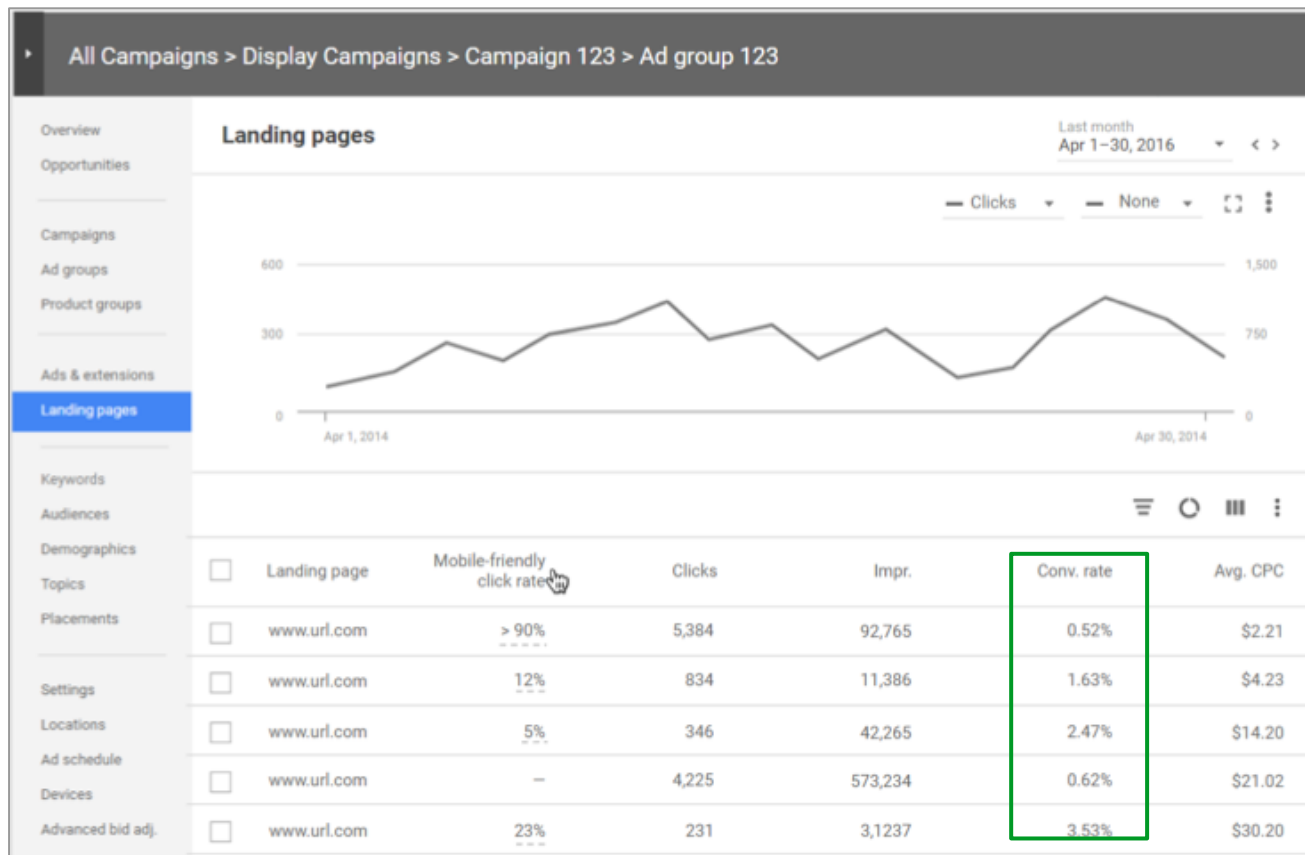
	2014	2015	2016	2017
A/B or multivariate testing tool	48%	52%	63%	71%
Content management system (CMS)	62%	43%	47%	57%
In-house built solution	-	32%	29%	25%
Marketing automation system	24%	22%	24%	30%
"Off-the-shelf" personalization tool	25%	22%	22%	23%
Other	4%	5%	4%	4%

*Note: 2014 n=106; 2015 n=103; 2016 n=102; 2017 n=96*

*Source: Econsultancy, "Conversion Rate Optimization Report 2017" in association with RedEye, Oct 11, 2017*



# Using data to choose testing scenarios



# Thinking about business impact

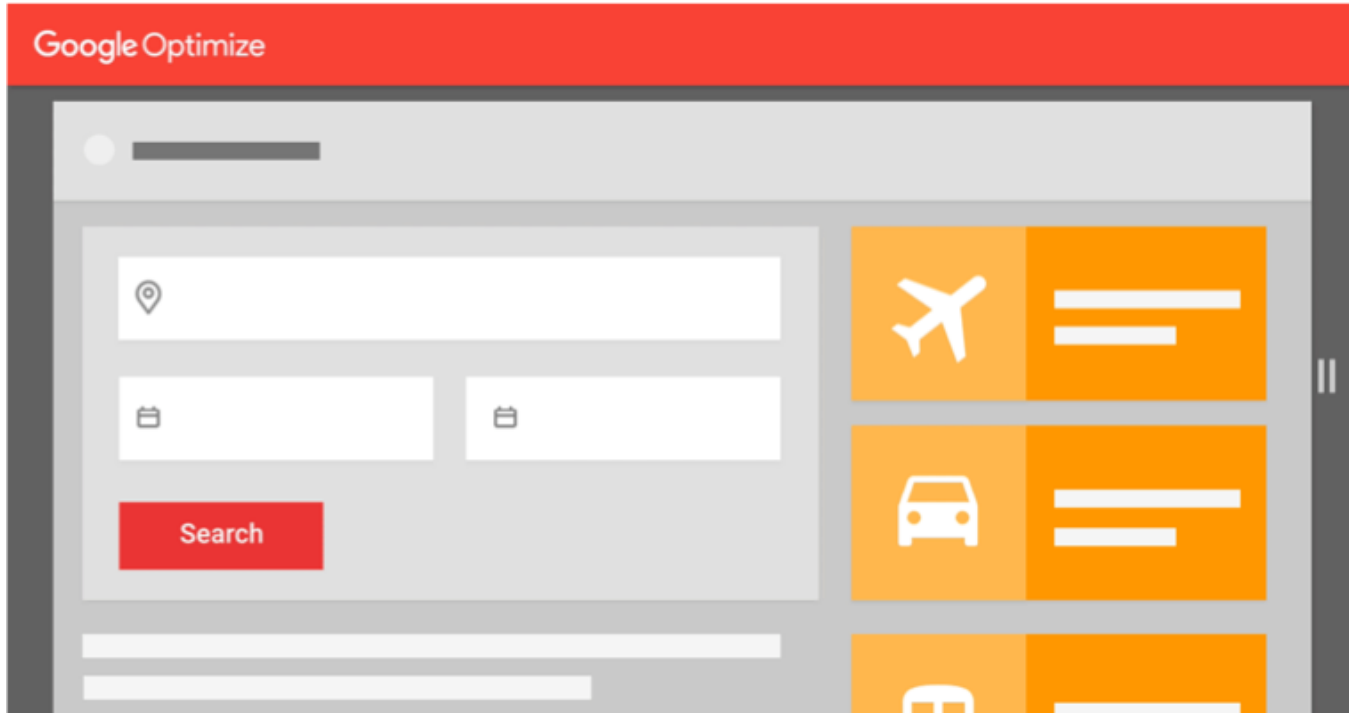
A	B	C	D
	<b>Ideas to A/B Test</b> If unclear please refer to the presentation using the idea #	<b>Expected Business Impact</b>	<b>Difficult of implementation</b>
1	1- Make your Value Proposition stand out in the above the fold area	Critical	Easy
2	2- Use the viewport more efficiently	Critical	Medium
3	3- Try to show adjust landing page to user's intent	Critical	Hard
4	4- Try to give users reasons to create an account	Medium	Medium
5	5- Make sure actionable links on your mobile site stay on natural areas	Critical	Easy
6	6- Try to differentiate better difference between options	Critical	Medium
7	7- Make site search visible	Low	Easy
8	8- Try to test different form sizes	Critical	Hard
9	9- Font should be bigger for easy reading	High	Medium
10	10- Optimize Price Comparison Page	Critical	Easy
11	11- Font should be bigger for easy reading	Critical	Easy
12	12- Try using a "Load / View More" function instead of pagination	High	Medium
13	13- Try to use advanced filtering options	High	Easy
14	14- Discussion: Test using urgency elements on category/result pages	Medium	Hard
15	15- Try adding your main value proposition to your product result pages	High	Medium
16	16- Try adding a "save to wishlist" button to your search result pages	Medium	Easy
17	Optimize Site Speed	Critical	Medium



# Optimize integration with AdWords



# Visual editor for Mobile



# Optimize integration with AdWords

US and Canada Website  
My first AdWords Experiment

DETAILS REPORTING

Draft. Some setup steps must still be completed. SHOW STEPS

Percentage of visitors to target 100.0 %

When  
Determines when the experiment is shown.

Evaluate on page load

Additional conditions

URL matches www.optimize.google.com

AND

Create rule

- URLs
- Google Analytics audiences
- Google AdWords
- Behavior
- Geo
- Technology
- JavaScript variable
- First-party cookie
- Custom JavaScript
- Query parameter





Departments

Room Ideas

Sales

Find anything home...



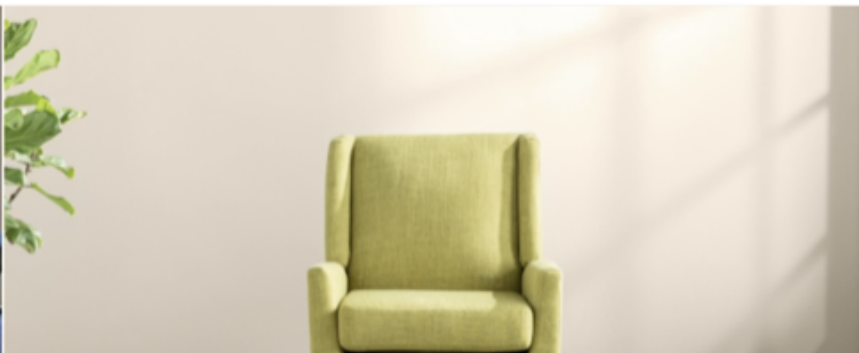
Saves



Account



Cart



“Our long-term investing approach and customer-centric mentality continue to pay off as we outpace the shift to online spending in our category and gain significant market share. [..] Technology, combined with continuous testing and innovation, allows us to constantly enhance the shopping experience while quickly scaling our operations”

Niraj Shah, CEO, co-founder



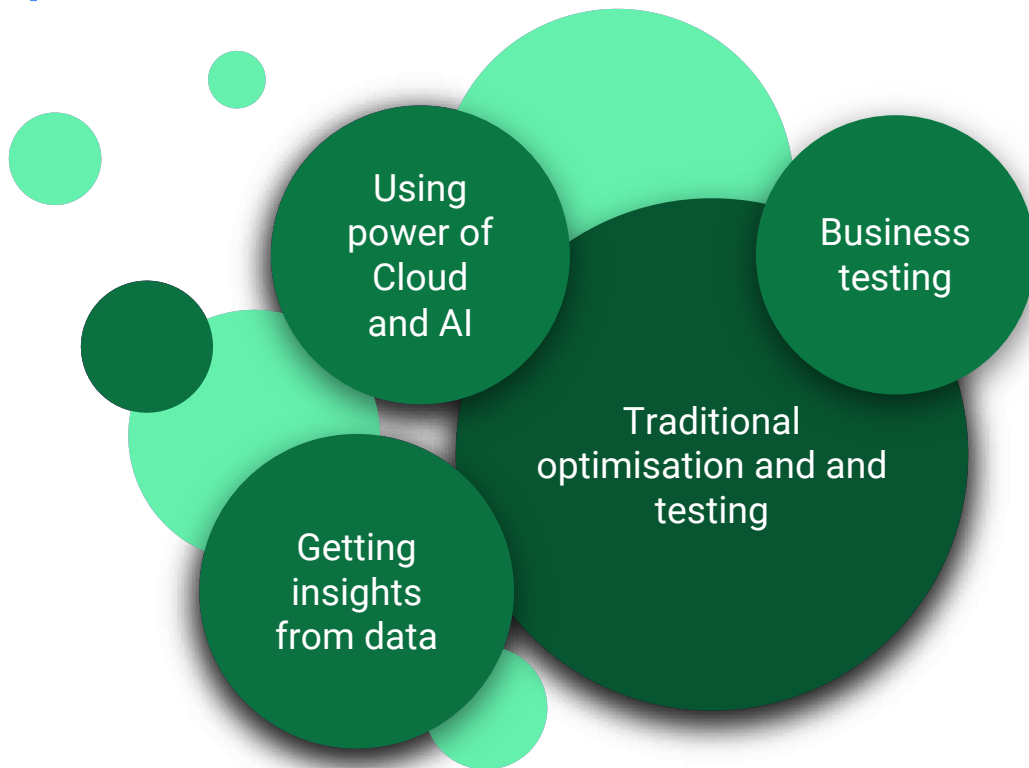


“Our long-term investing approach and customer-centric mentality continue to pay off as we outpace the shift to online spending in our category and gain significant market share. Technology, combined with continuous testing and innovation, allows us to constantly enhance the shopping experience while quickly scaling our operations”

Niraj Shah, CEO, co-founder



# Testing and optimisation on Mobile



# Walmart case study

+98% orders

The screenshot shows the Walmart Canada website desktop interface. The top navigation bar includes the Walmart logo with the tagline 'Save money. Live better.', a 'Shop All Departments' button, and links for Feedback, Help, Ad Choices, and Français. Below this is a search bar with the placeholder text 'What product are you looking for?' and a 'Search' button. The main content area features several promotional banners: 'Create your outdoor escape' with a 'Shop' button, 'Make a splash!' for swimming pools, 'Happy father's day' with a 'Shop' button, and a 'SAMSUNG' banner for Father's Day. The left sidebar lists various product categories: Appliances, Automotive, Baby, Clothing, Shoes & Accessories, Electronics, Furniture, Grocery, Health, Beauty & Pharmacy, Home, Jewellery & Watches, Movies, Music & Books, Office, Outdoor Living, Sports & Rec, and Toys.

The screenshot shows the Walmart Canada website mobile interface. The top navigation bar includes the Walmart logo with the tagline 'Save money. Live better.', a 'Shop All Departments' button, and links for Feedback, Help, Ad Choices, and Français. Below this is a search bar with the placeholder text 'What product are you looking for?' and a 'Search' button. The main content area features a 'SAMSUNG' banner for Father's Day and a 'Make a splash!' banner for swimming pools.

This screenshot shows a close-up of the Samsung Father's Day promotion on the Walmart Canada mobile app. It features two Samsung tablets: the Tab E 9.6" priced at \$229.99 and the Tab A 8" priced at \$199.99. A 'Shop' button is visible below the tablets. The text 'Great Savings for Dad this Father's Day' is displayed above the tablets.

This screenshot shows a close-up of the 'Make a splash!' promotion on the Walmart Canada mobile app. It features a banner for swimming pools with the text 'Make a splash!' and 'Swimming Pools'. The banner includes an image of a swimming pool with people and a 'Shop' button.

# Getting to the right data...





# Hire the right people



**Data Scientist**



# Mobile user often behaves in different way

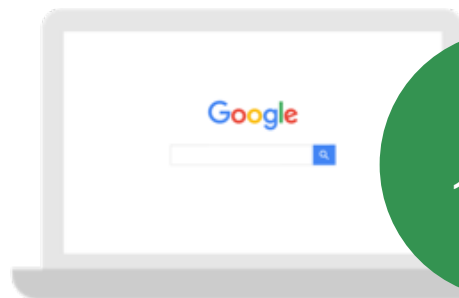
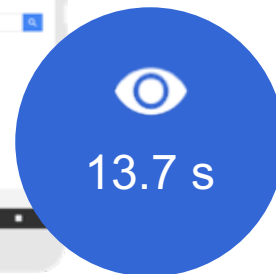
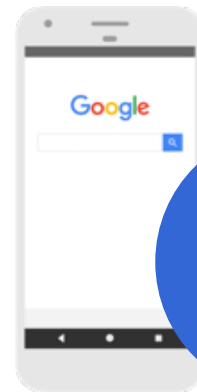
**13.7 sec**

is the average view time of search results on smartphones before decisions (clicks) are made.

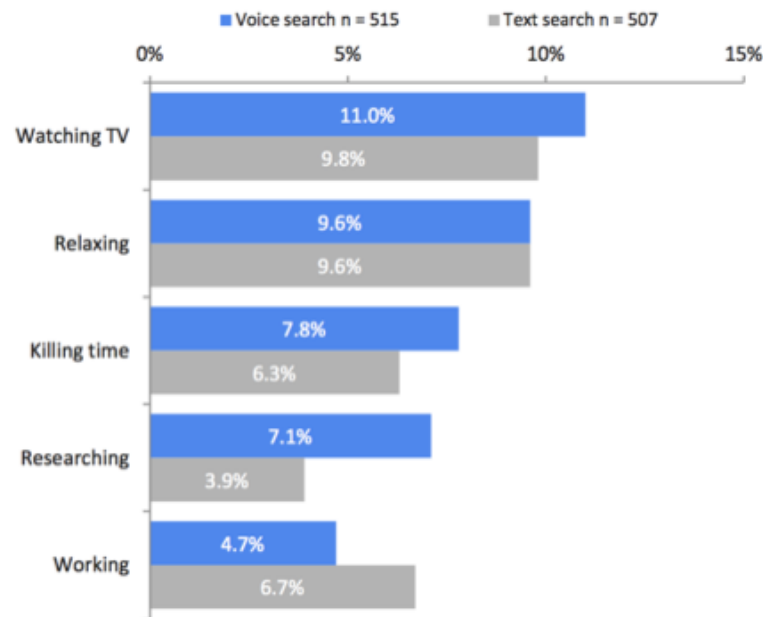
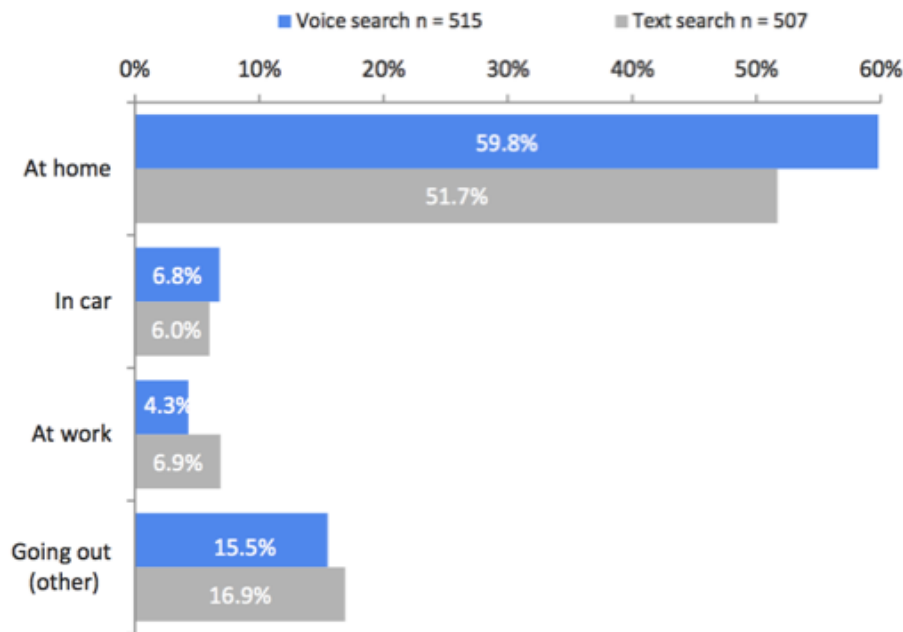
This time is ...

**1.7 sec (11%)**

shorter compared to desktop.



# Find insight then it is easier



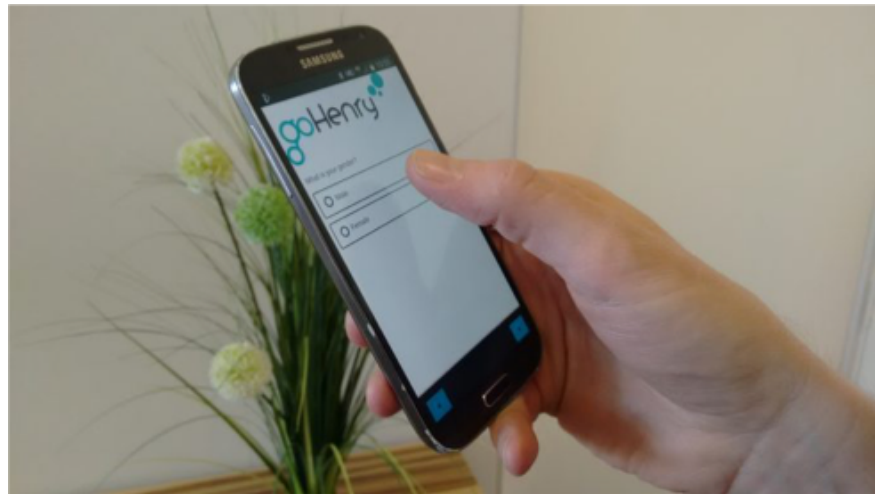
Źródło: Voice search JP users insights study, Q3 2017





# Landing pages for Mobile - goHenry case study

- Mobile users were more impulsive. Many landed on the site on a whim—so knew much less about what was being offered.
- They were 40% more likely to have concerns about trust and security.



# goHenry case study: landing page testing



Sign ups: + 78%

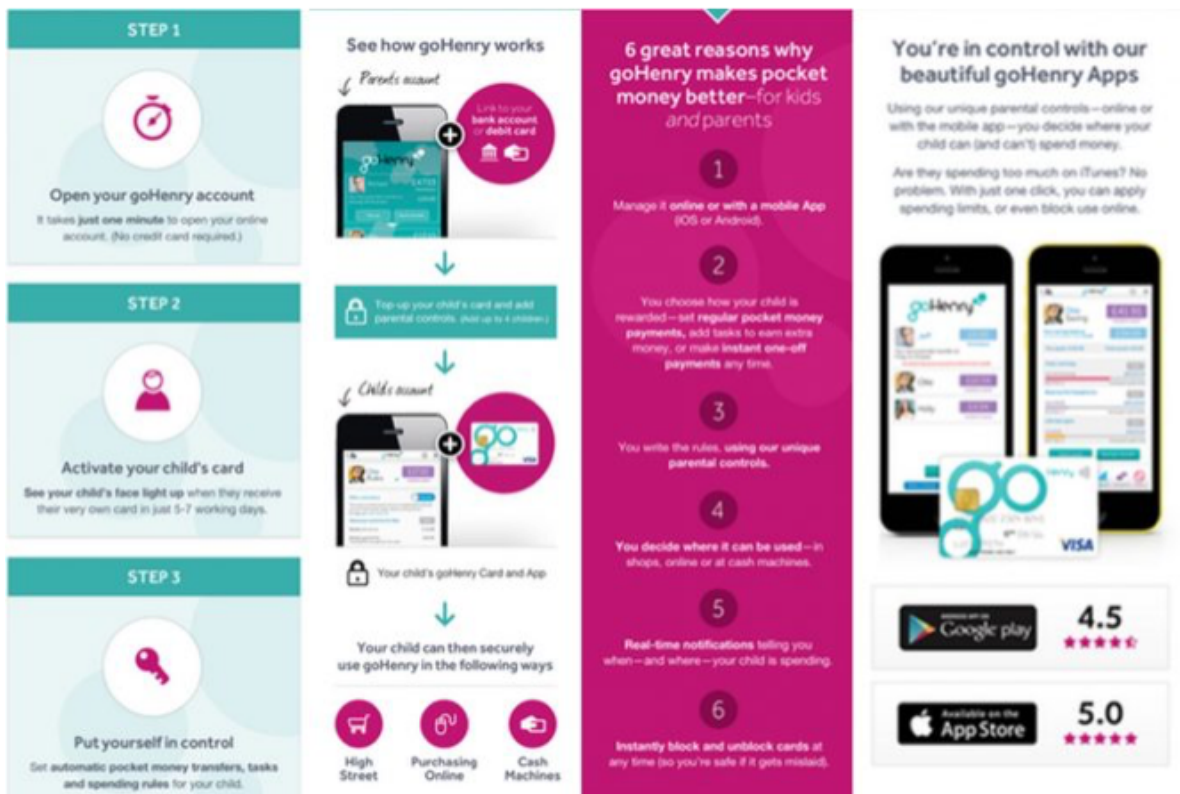


# goHenry case study: pricing page

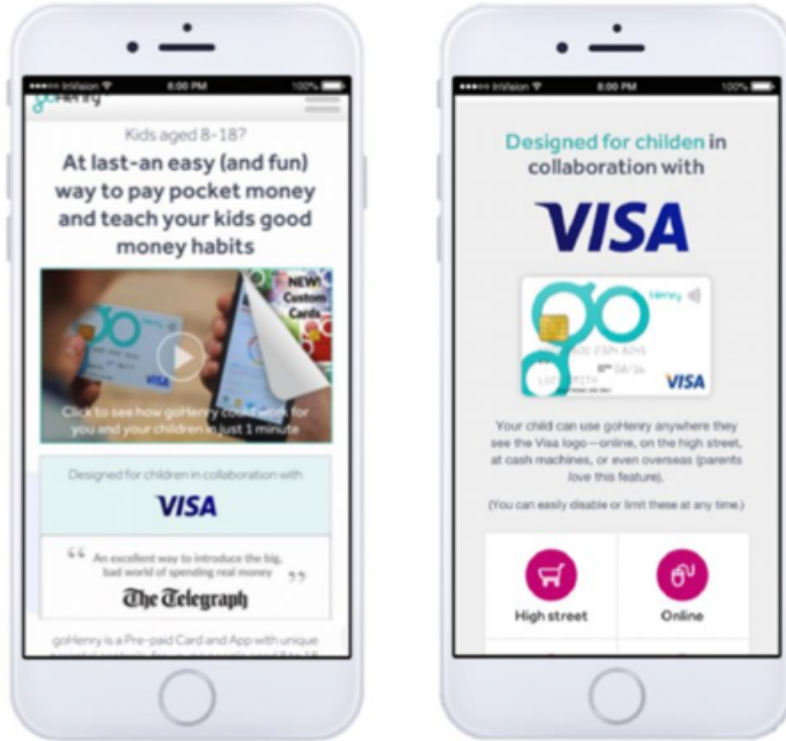
Sign ups: + 36%



# goHenry case study: visual information



# goHenry case study: building trust



# goHenry case study: dealing with fear



Plus, you'll never pay a penny for these great services:

- Free UK cash withdrawals.
- No overdrafts, so no overdraft fees.
- Free goHenry card for your child to use.
- Free telephone and email support, so you'll always have help when you need it.
- Load your account for free using Standing Order or bank transfer.



## Try the Award-Winning Online Learning Tool for Children— completely FREE for 3 months

Thousands of parents are discovering why goHenry is an easy (and fun) way to pay pocket money and teach your kids about money.

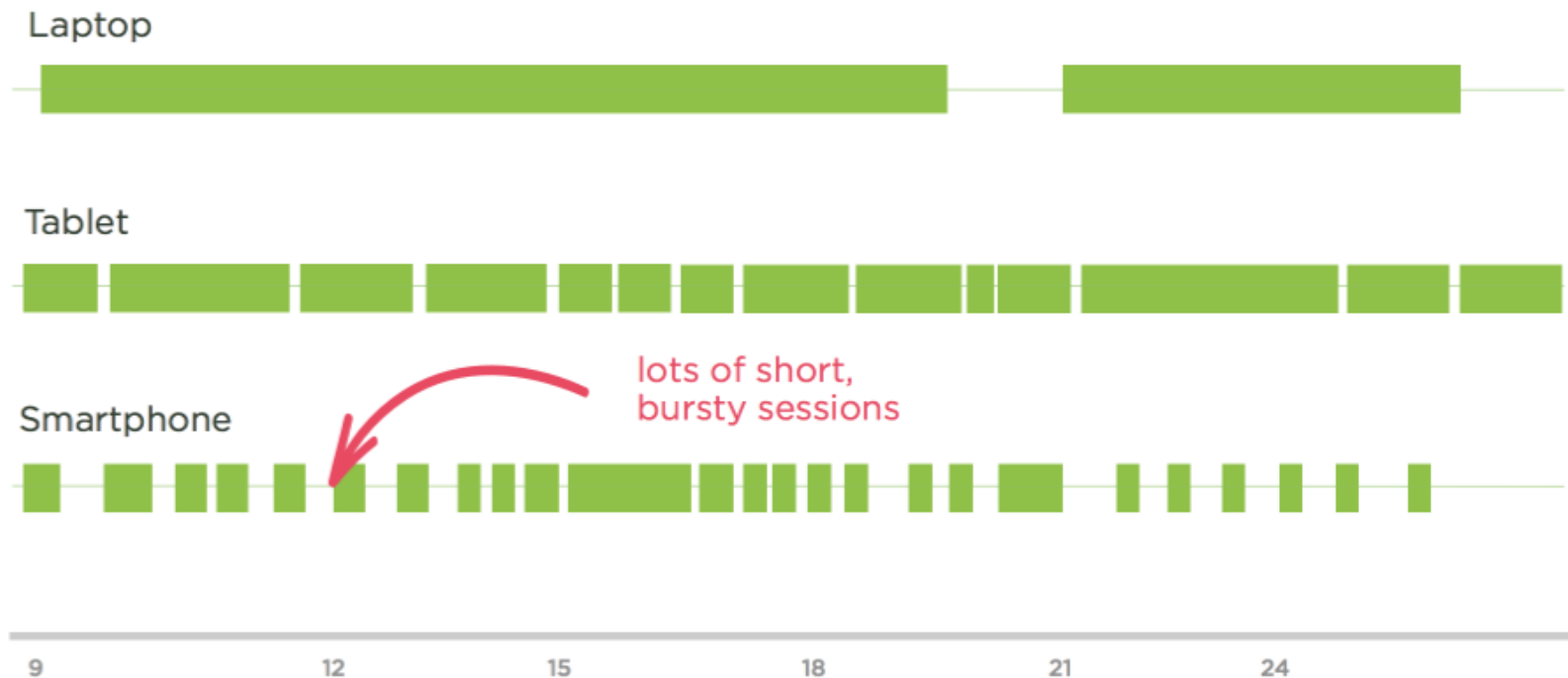
That's why, for a limited time, we are offering a completely FREE two-month trial

After 2 months—**ONLY if you're 100% delighted with goHenry**—you can choose to move onto our paid plan for just £2.49 per child per month.

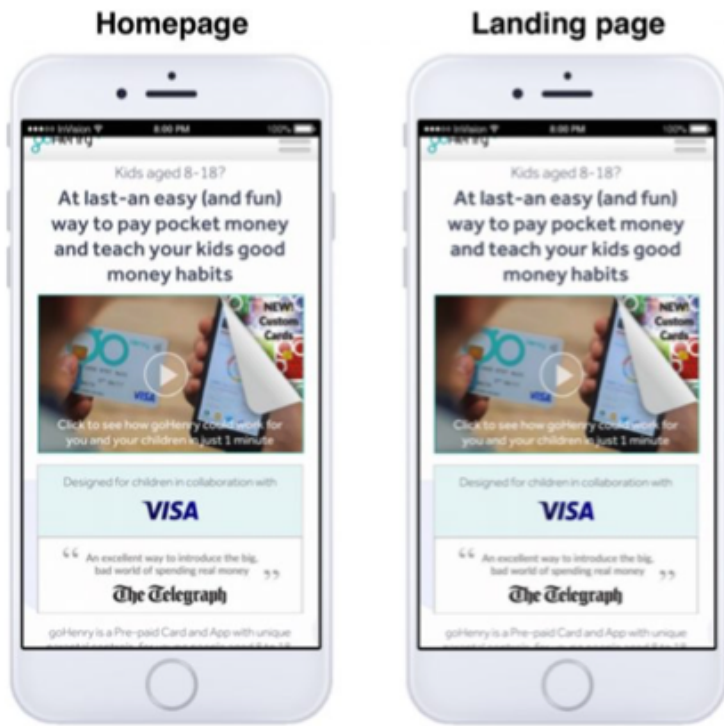
**Try goHenry for free**



# goHenry case study: mobile behaviour



# goHenry case study: consistency

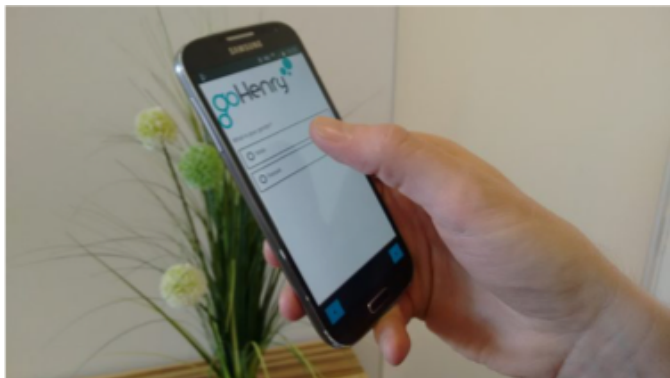


+23% increase in sign-ups from homepage optimization



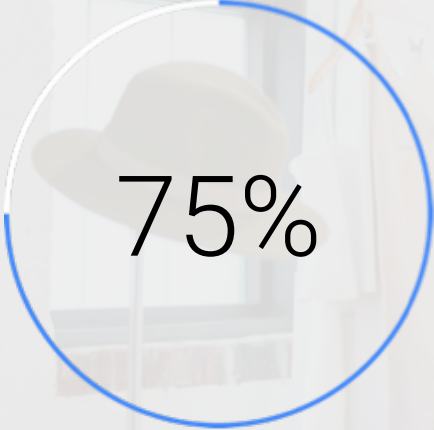


# goHenry case study: mobile strategy



*“Don’t assume that your mobile visitors are just desktop visitors on a different device.”*





75%

expect a consistent experience,  
whether it is online, social, mobile  
or in person.



64%

of consumers expect companies  
to respond and interact with them  
in real time.



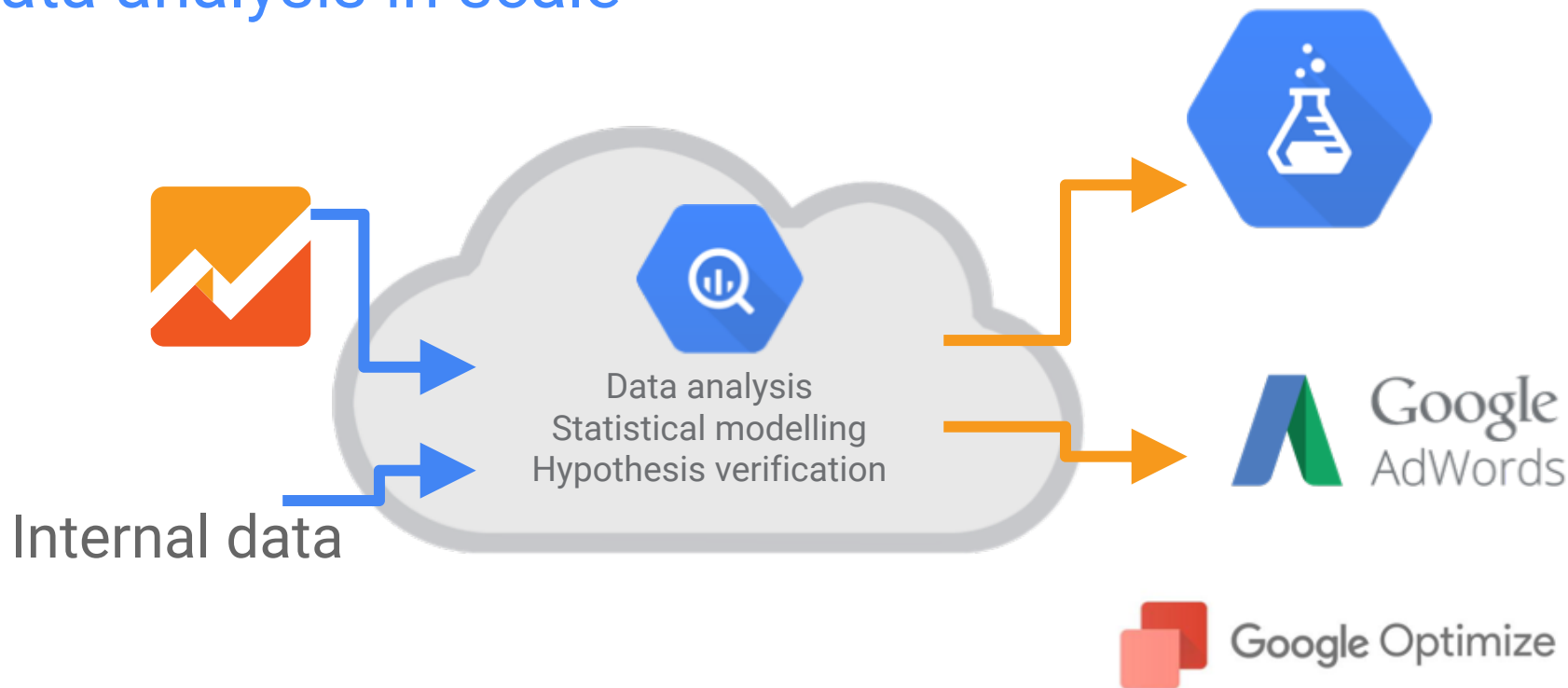
2/3rd

of consumers will switch brands if  
they're treated as numbers instead  
of individuals.

# Testing and optimisation on Mobile



# Data analysis in scale





“The economics of **Cloud**  
**are real.**”

**49%**

of North American  
orders placed from  
mobile devices

**4.1M**

active customers



Use **Hadoop & BigQuery** for real-time insights across their customers

# AI is getting a way to optimize user experience in scale

## Expected Growth in Spending on Select Emerging Technologies According to Retailers in North America, Oct 2017

% change

Proximity/location-based marketing

7.3%

Artificial intelligence/machine learning

7.0%

Predictive/prescriptive analytics

6.7%

Conversational commerce

5.5%

Big data

5.3%

Internet of things

3.5%

SD-WAN (software-defined wide area network)

2.8%

Augmented/virtual reality

1.4%

RFID

1.3%

Note: vs. 2017

Source: IHL Group and RIS News, "Store Experience Study 2018: Retail Tech Spend Trends," Jan 9, 2018

234414

www.eMarketer.com





Google

4X

Faster at  
responding  
to urgent  
emails

10,000% ROI

With minimal  
system cost  
of ~£100 /  
month



*Utilize machine learning with Google Cloud*

# What is TensorFlow?

Google's **open source** library for machine intelligence

**tensorflow.org** launched in Nov 2015

Used by many production ML projects





# Machine Learning services on Google Cloud

## Custom ML models



TensorFlow



Machine Learning Engine

## Pre-trained ML models



Vision API



Speech API



Jobs API



Translation  
API



Natural Language  
API



# Machine learning is getting easily accessible



CloudML



Scale, No-ops  
Infrastructure

ML APIs



Translate API



Vision API



Speech API



Language API

Use/extend OSS SDK

Build custom models

Use pre-built models

ML researcher

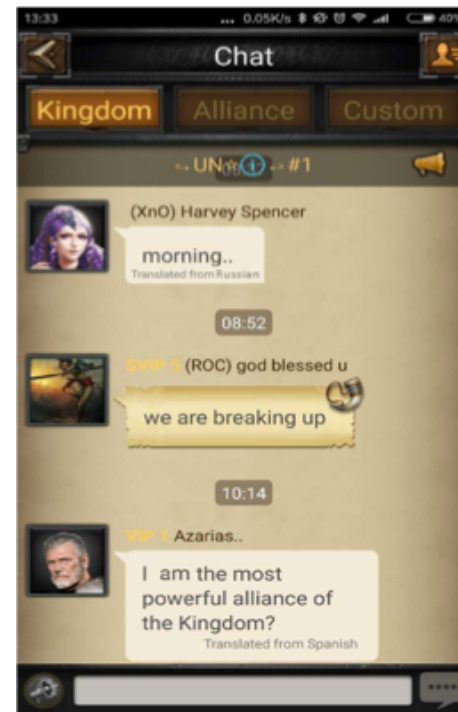
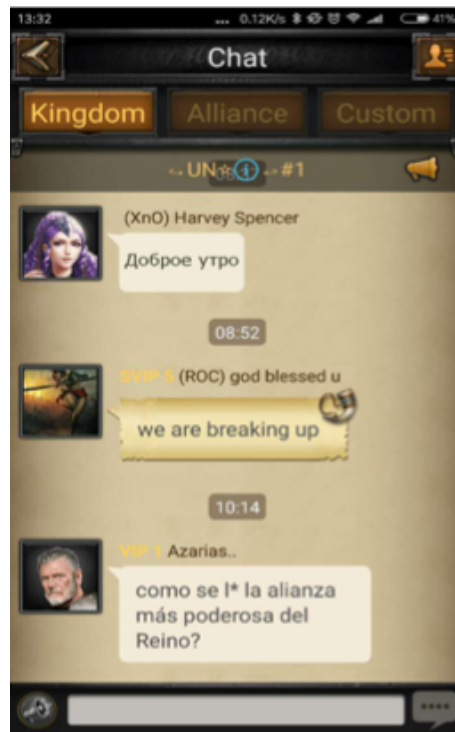
Data Scientist

App Developer

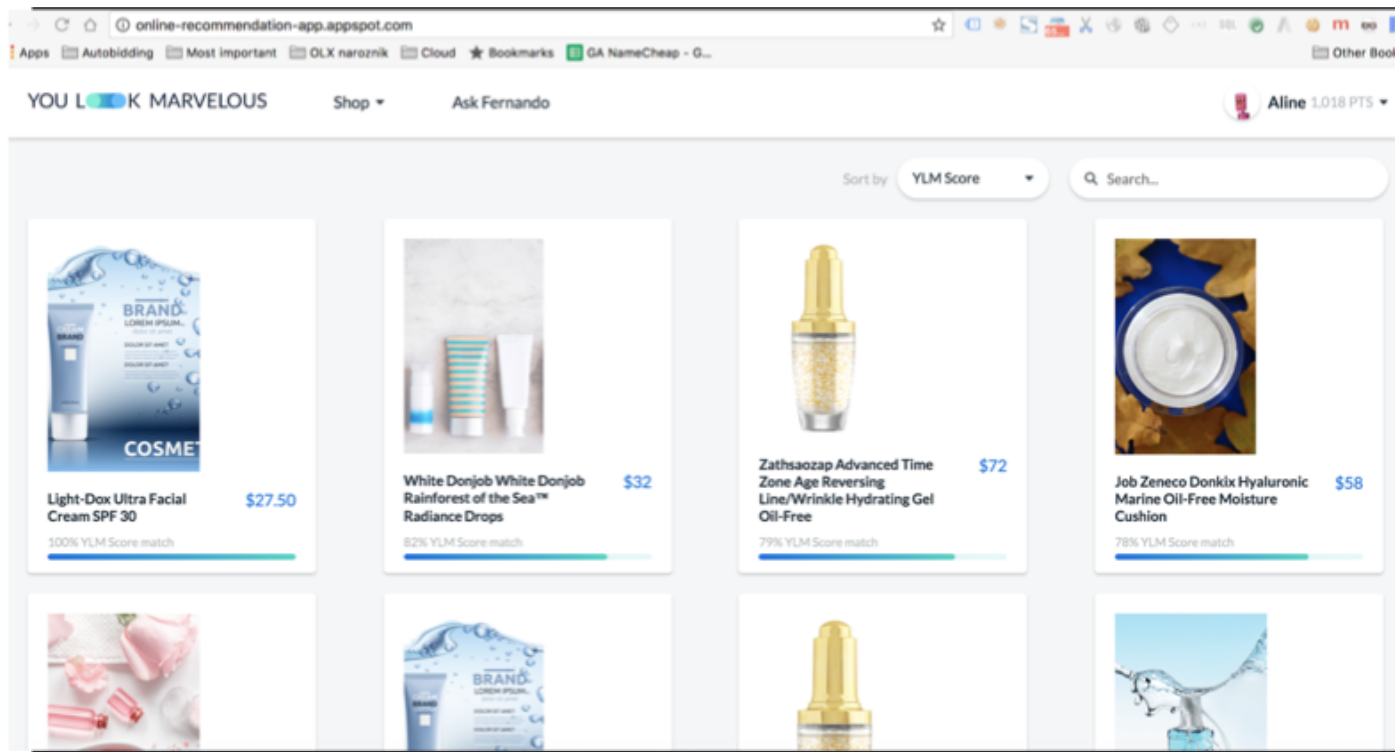
# Clash of Kings case study



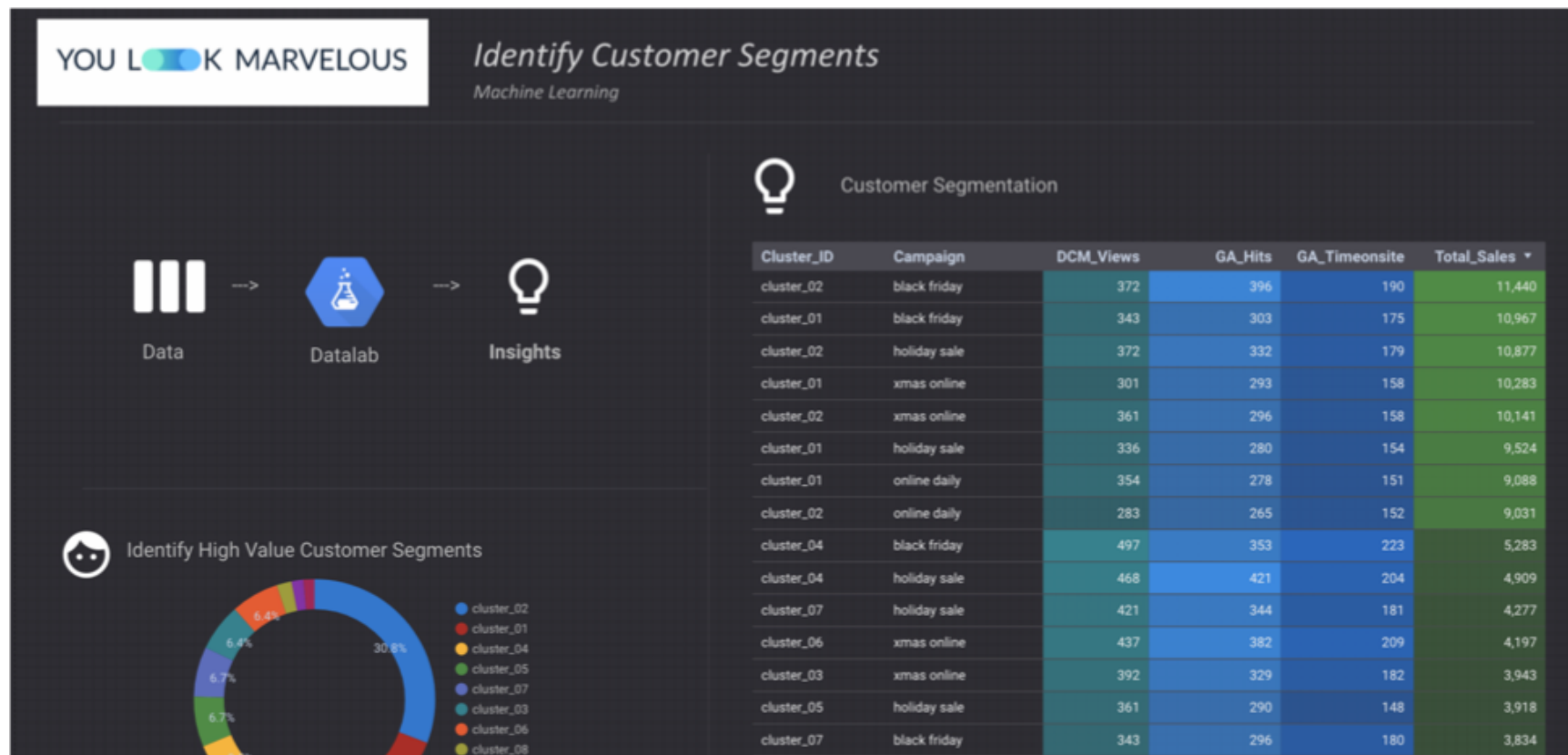
- 15% of DAUs will participate in chat with other gamers, 8-10M chats per day
- Millions of gamers made friends from other countries
- At least 3 couples got married, and they are even from competing tribes!



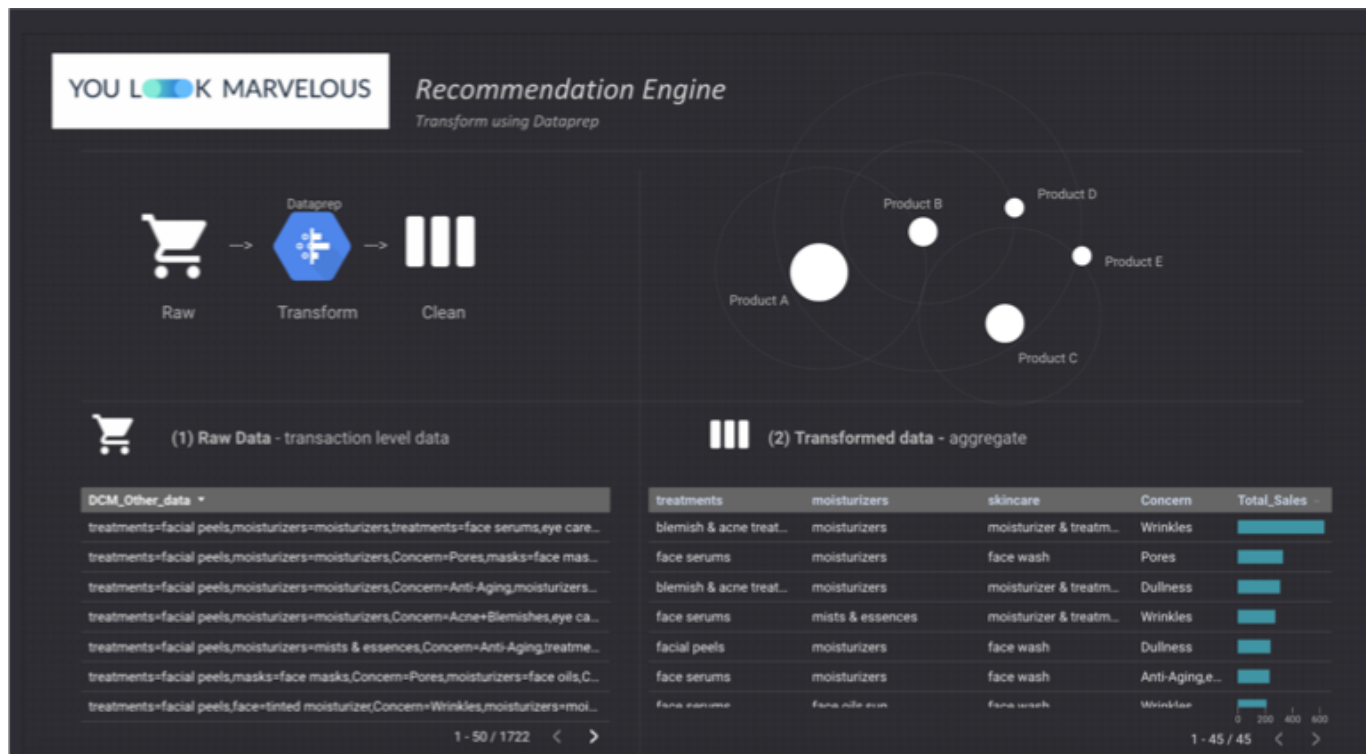
# Example



# User's segments



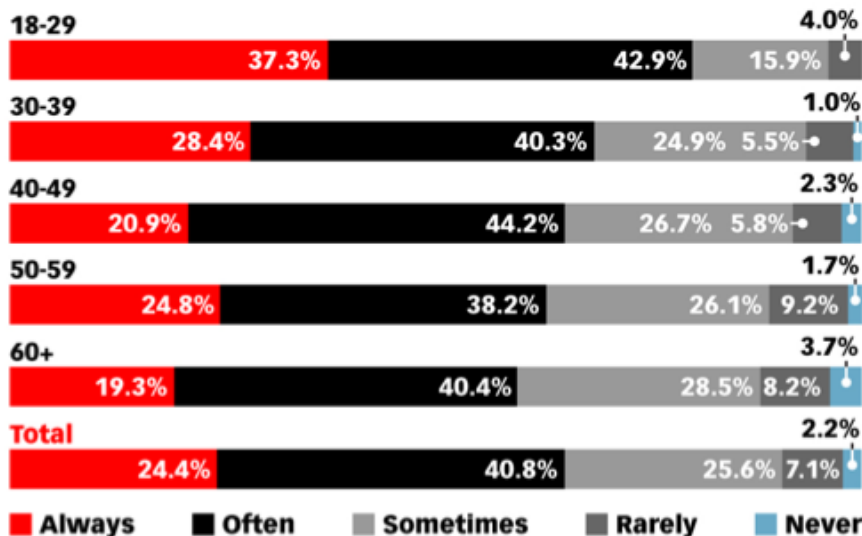
# Recommendation engines



# As we know customers use reviews...

## Frequency with Which US Internet Users Reference Product Reviews Prior to Making a Purchase, by Age, Feb 2018

% of respondents in each group



Note: numbers may not add up to 100% due to rounding

Source: "The eMarketer Ecommerce Insights Report," conducted in February 2018 by Bizrate Insights, Feb 7, 2018

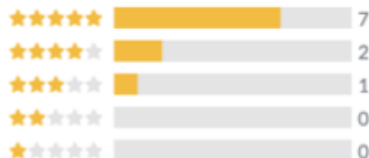
235570

[www.eMarketer.com](http://www.eMarketer.com)

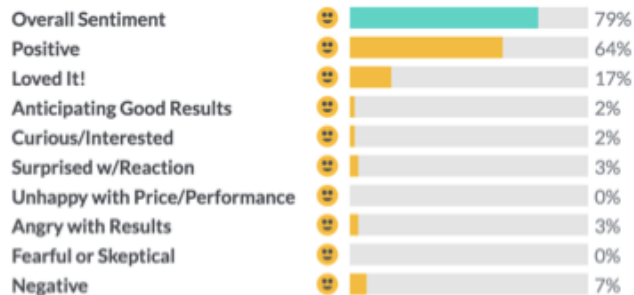


# Better and more reliable reviews

Overall Rating 4.60



Social Sentiment



“ I have a combination skin (with dry cheeks area), and I have been looking for a perfect cream/ gel for such a long time. Unfortunately, most of the emulsion-type moisturizers are oil-absorbing or drying and are targeted towards just light moisturi...

★★★★★

“ I have been using Estée Lauder serums for the past few years, since I've turned 30...the CP R and ANR to be specific. I have combination skin that's prone to breakouts so I've had some awful experiences with moisturizers, even gel moisturizers. However, at m...

★★★★★

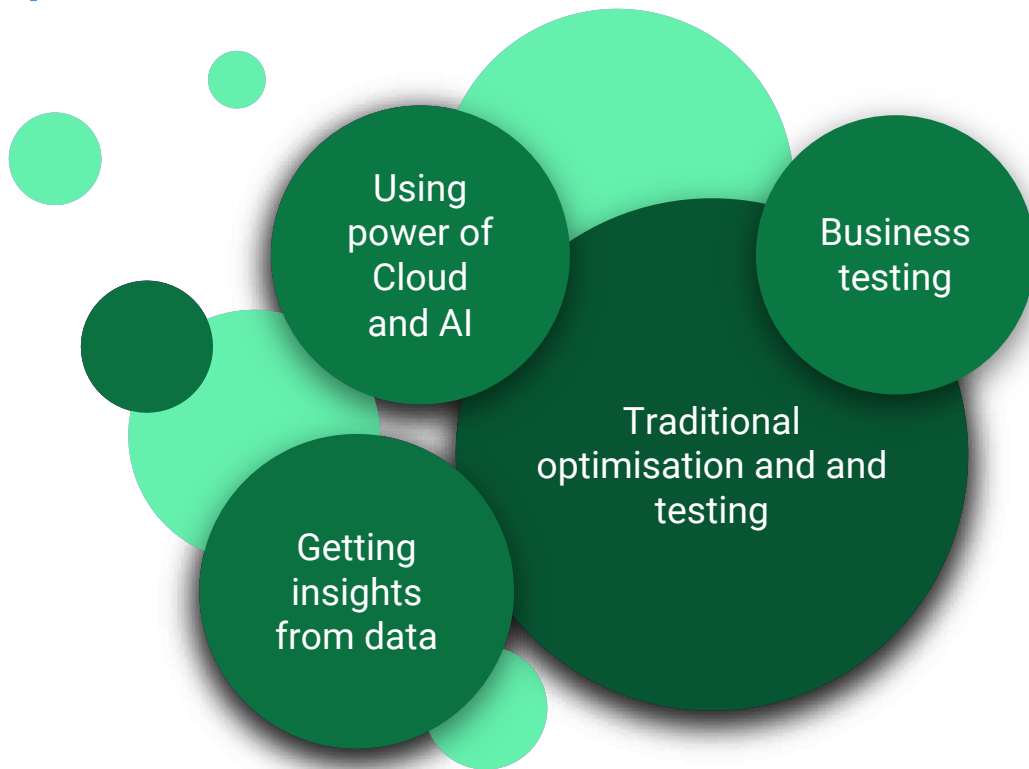
“ I like this gel... I've been using it almost . see some difference in my ski

★★★★★





# Testing and optimisation on Mobile



# Digital technologies that Ecommerce Professionals Worldwide plan to experiment with by 2020

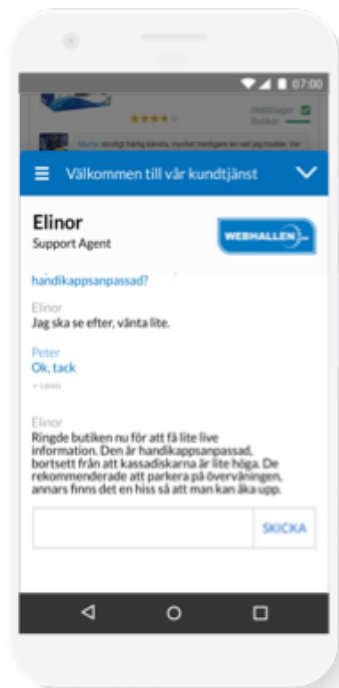
	Agency*	Client-side**
Conversational commerce (e.g., chatbots, personal assistants)	40%	59%
Artificial intelligence for personalization	39%	55%
Digital wallets/mobile payments	40%	44%
Social commerce	48%	40%
Voice technology	18%	18%
Beacon technology	15%	15%
Different interfaces (e.g., smart watches, internet of things)	14%	13%
None of these	18%	16%

*Note: \*includes ecommerce service providers (i.e., agencies, platform implementers, software vendors); \*\*includes client-side/brand marketers at ecommerce companies*

*Source: Econsultancy and Conversion, "Ecommerce Performance Report 2018," Jan 18, 2018*



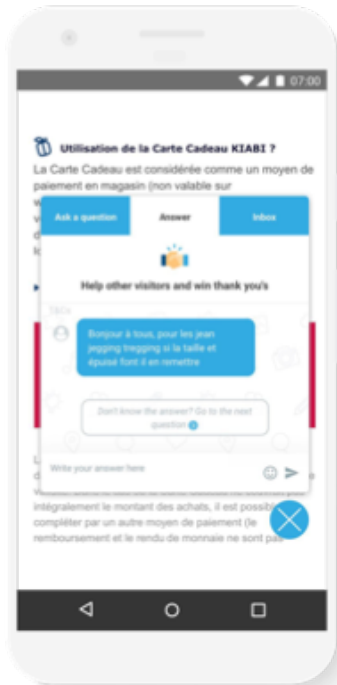
# Webhallen example



Mobile optimised chat, being transparent and clear with their waiting times, and providing the user with other means to contact them.



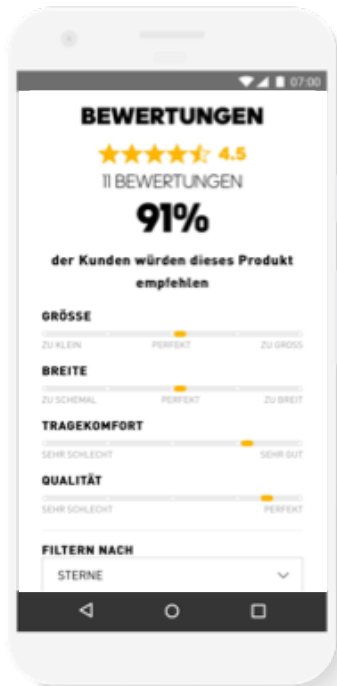
# Kiabi example



Peer-to-peer chat available on the mobile site, connecting users with other Magasin Kiabi customers.



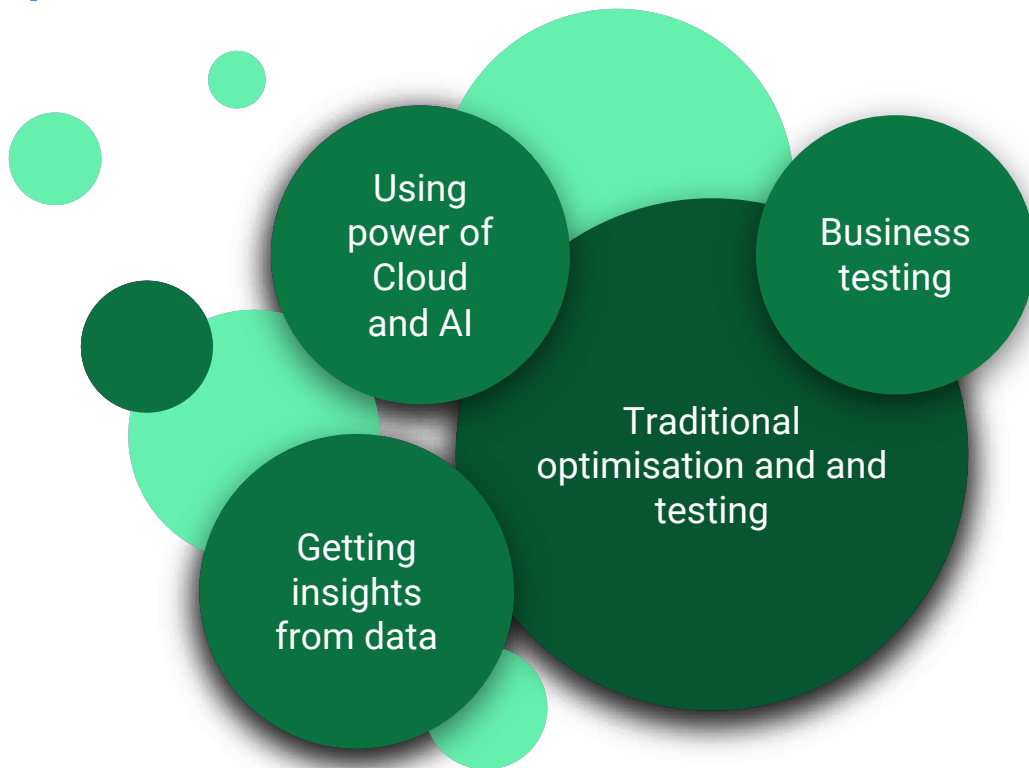
# Adidas example



Best-in-class rating and review system that includes product attribute based ratings, voting on reviews, review verification and an option to filter reviews.



# Testing and optimisation on Mobile



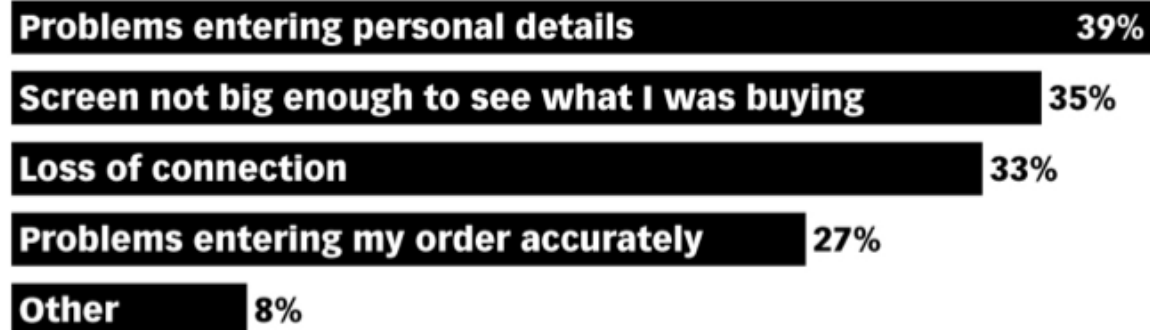
# Persistence is what creates a value



# Let's remember about it!

## **Mcommerce Issues that Resulted in Cart Abandonment According to Digital Buyers in Germany, the UK and US, Nov 2017**

*% of respondents*



*Note: ages 18+*

*Source: Addressy, "Fixing Failed Deliveries: Improving Data Quality in Retail" conducted by Loudhouse, Dec 5, 2017*

235012

[www.eMarketer.com](http://www.eMarketer.com)





Thank you

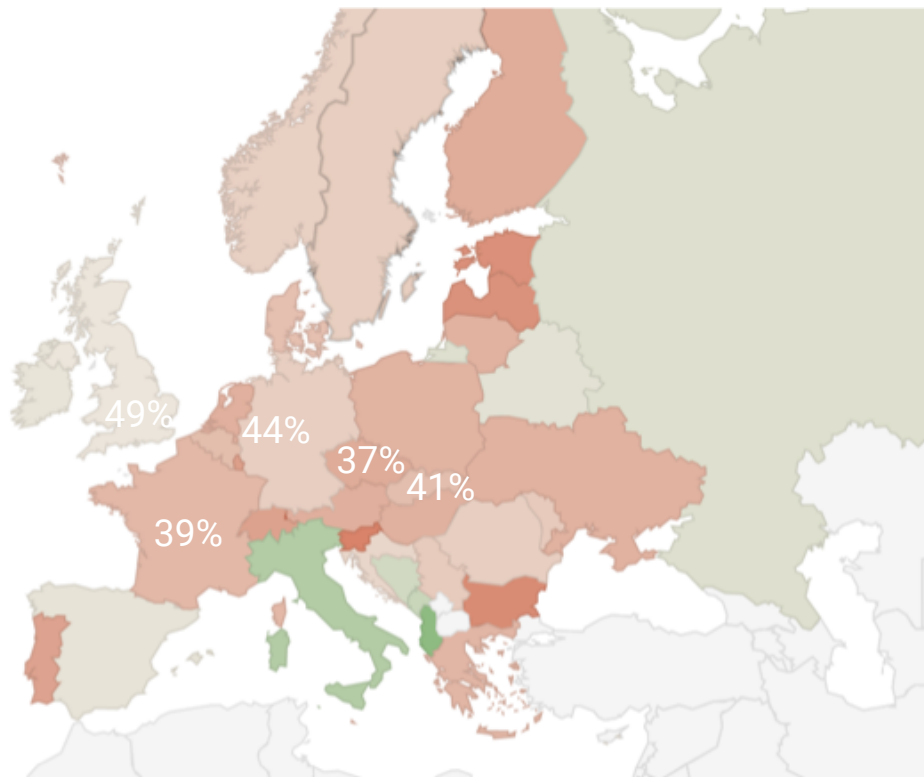


# Summary. What is coming next?

Mariusz Gąsiewski

# Ukraine is not an European backwater

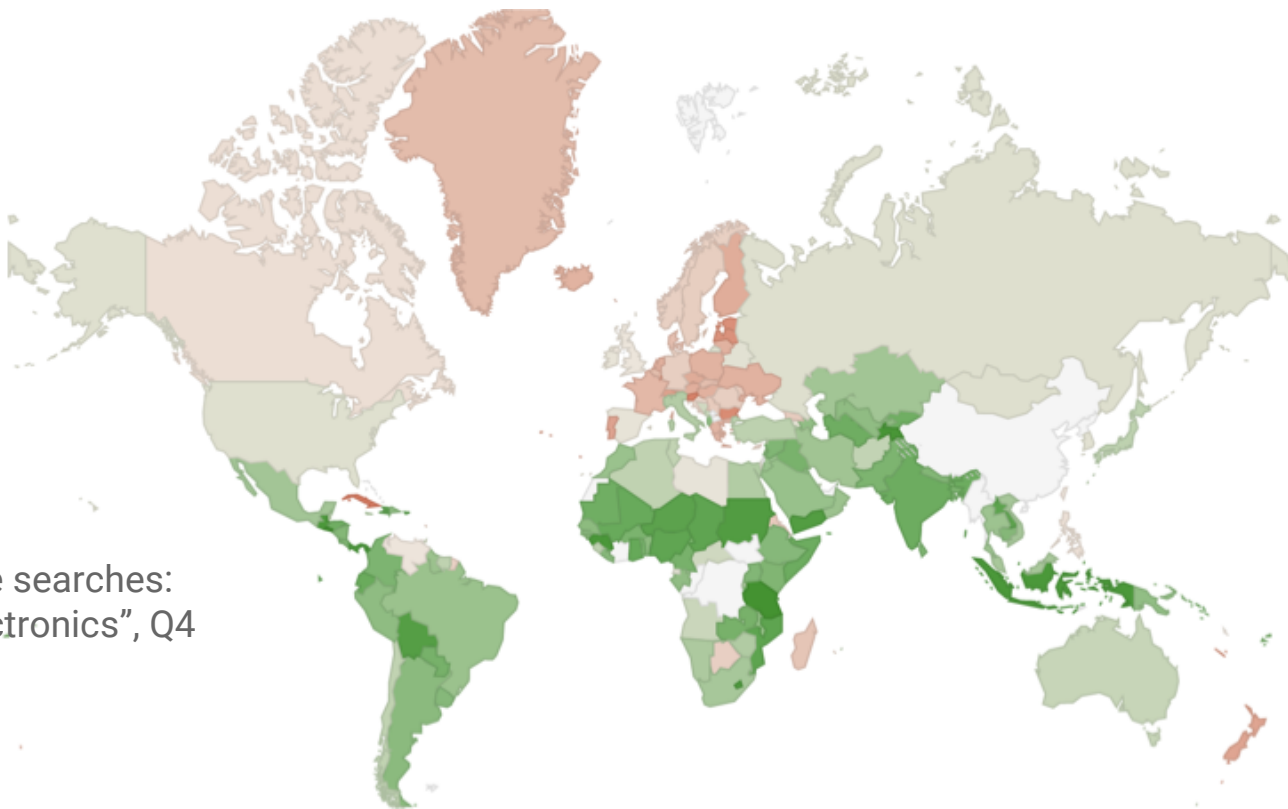
Share of mobile searches:  
"Consumer electronics", Q4  
2017



Source: Google internal data



# The best is just coming!

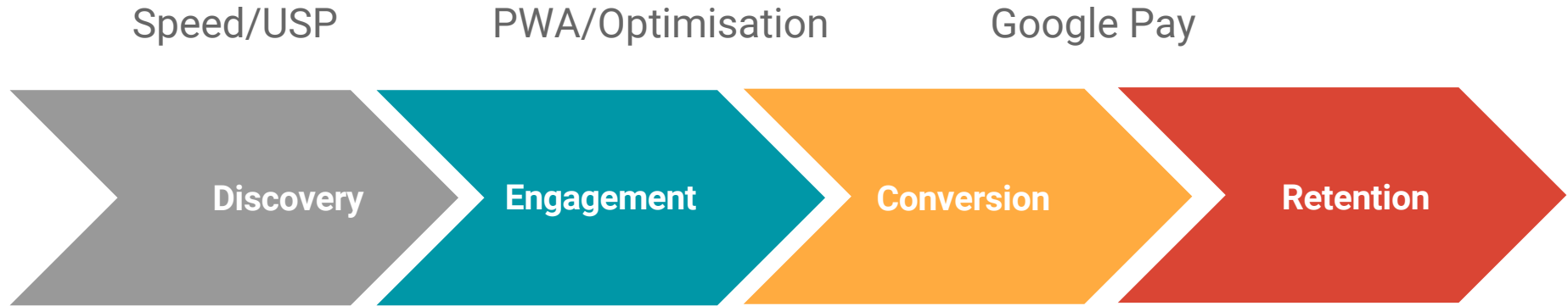


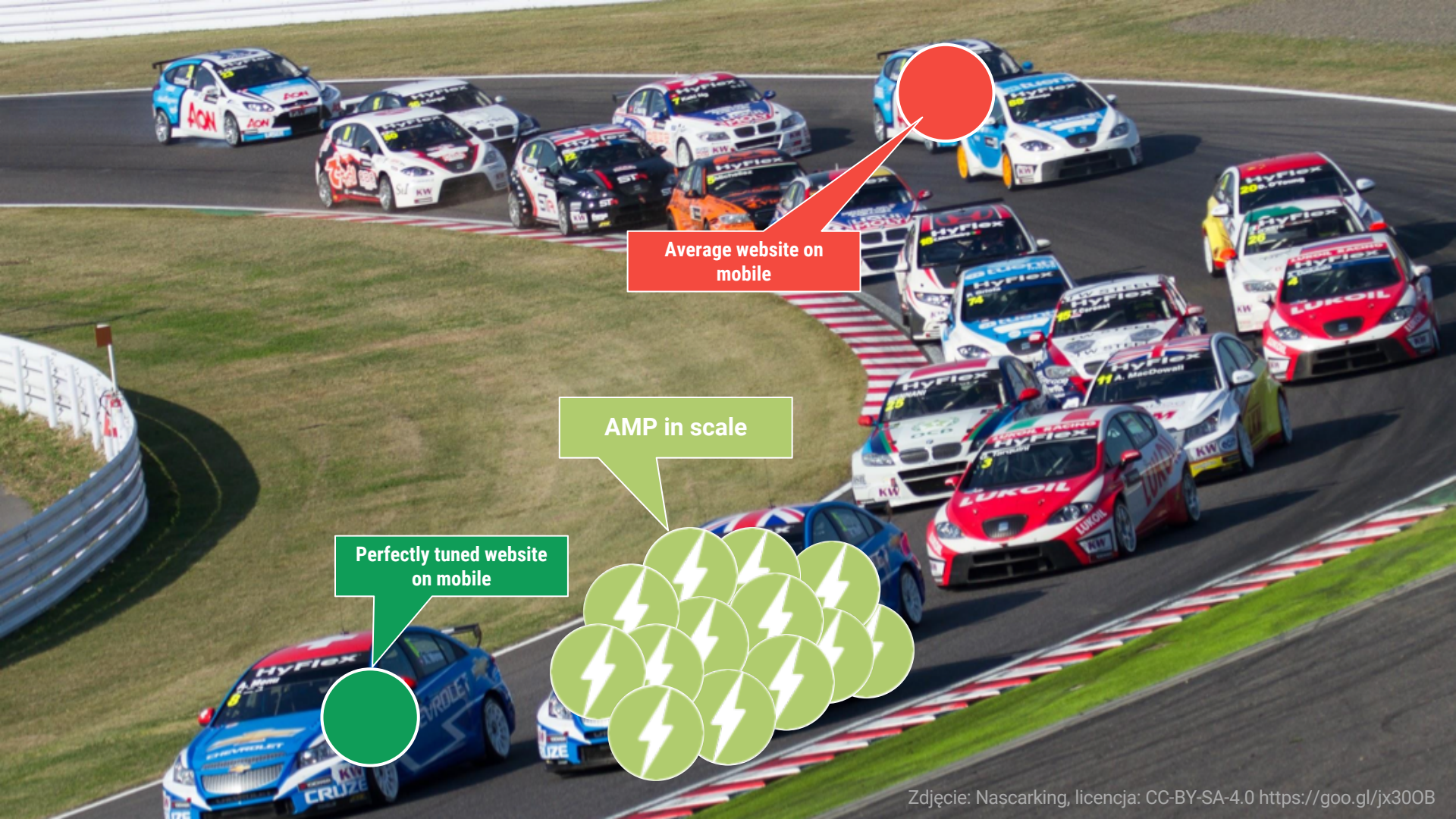
Share of mobile searches:  
"Consumer electronics", Q4  
2017

Źródło: Dane wewnętrzne



# Help me buy faster

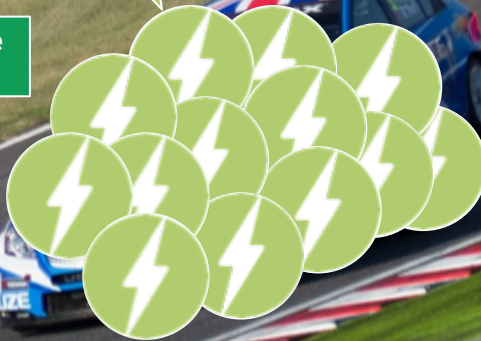




Average website on mobile

AMP in scale

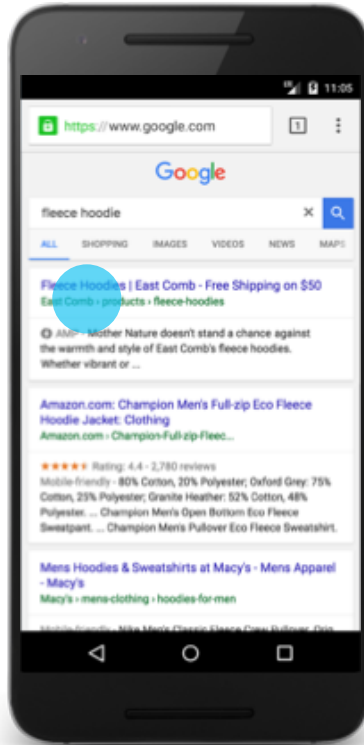
Perfectly tuned website on mobile



We want to buy a hoodie



We start from search



We choose a product

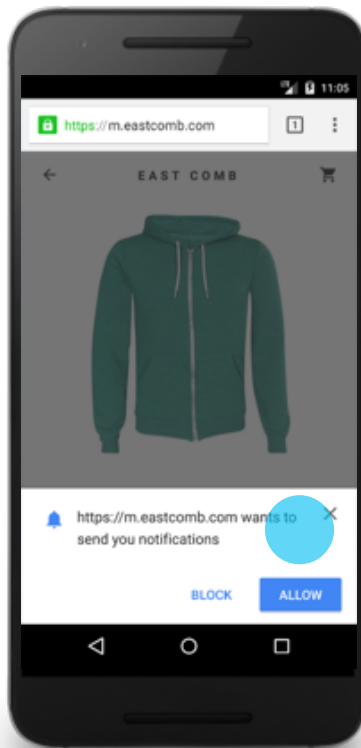




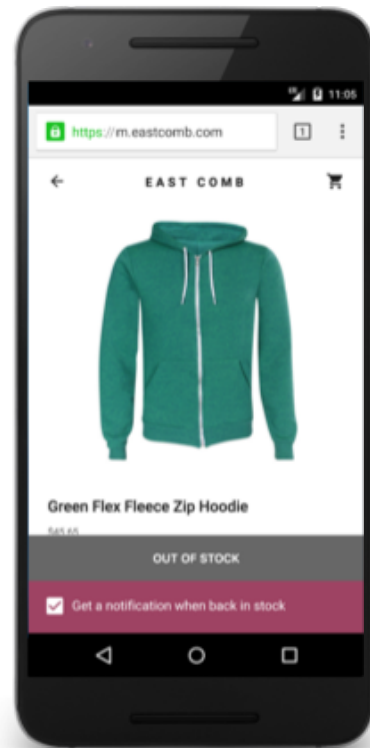
No product in the inventory



We are fine with notification..



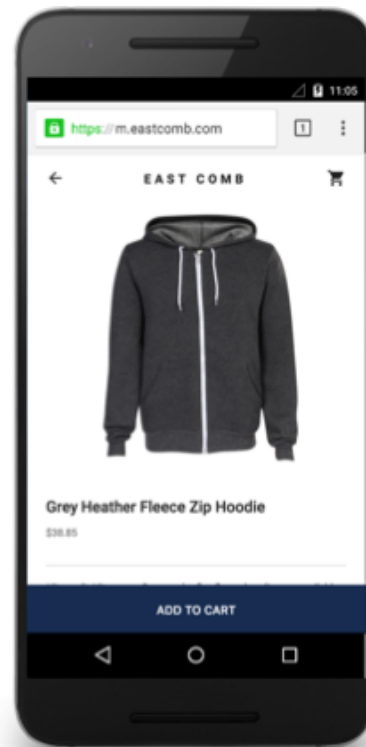
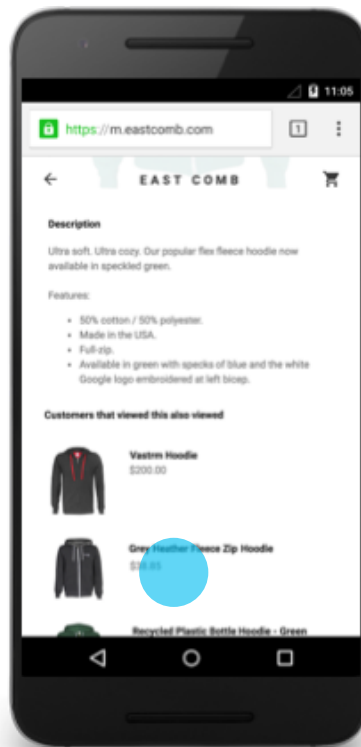
We are giving its permission



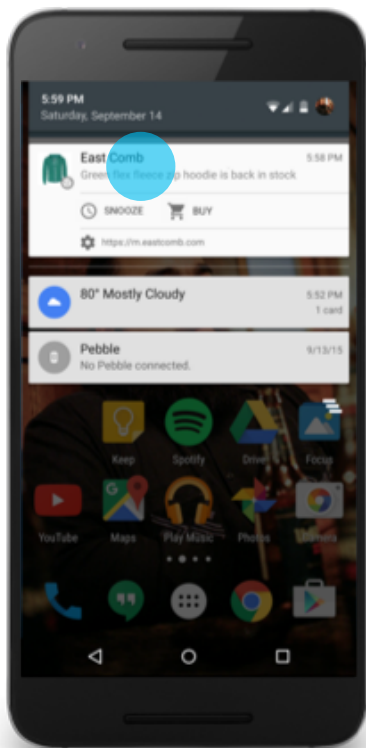
We are losing connection  
to network



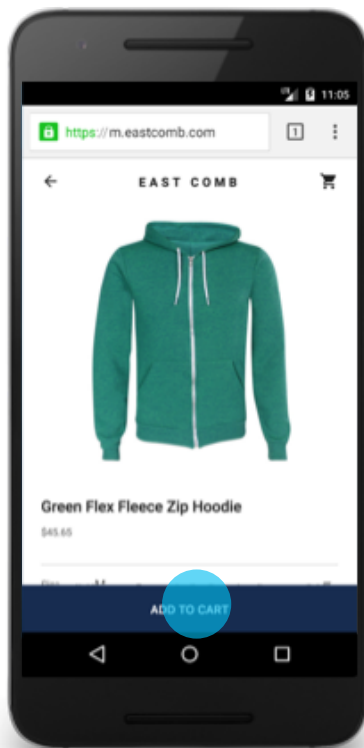
...although website is still  
working



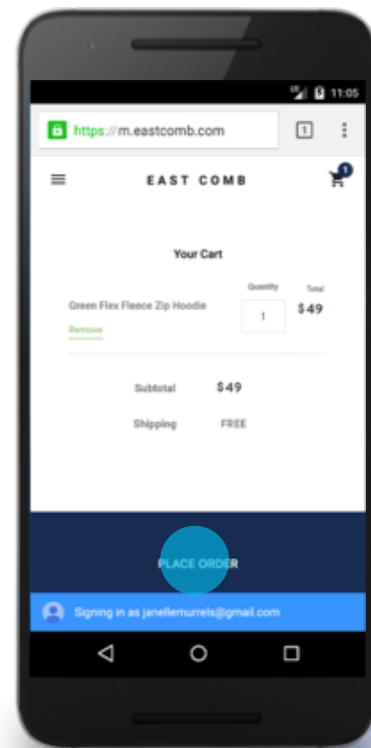
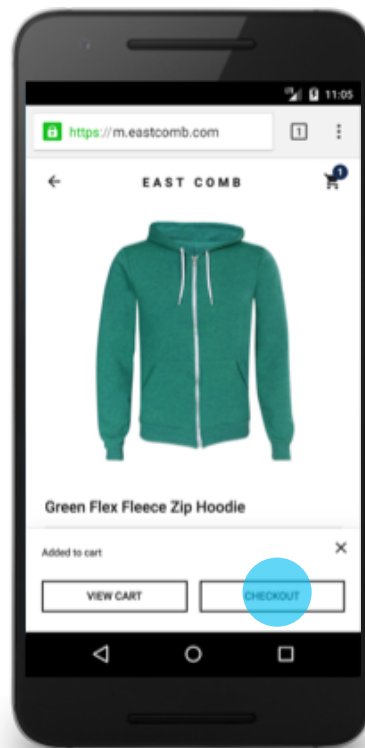
“Push” information is Product is added to shopping cart coming



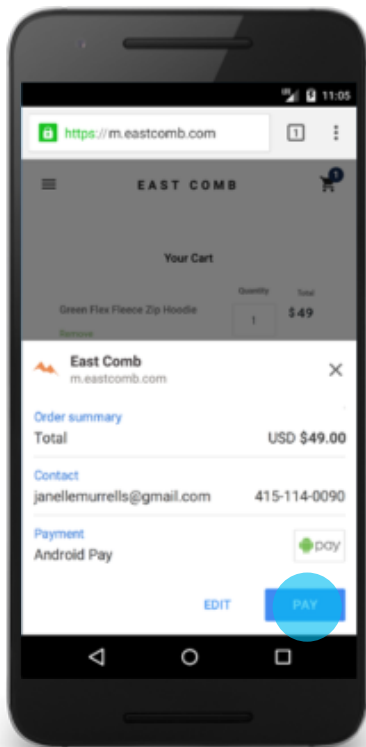
Fast check out



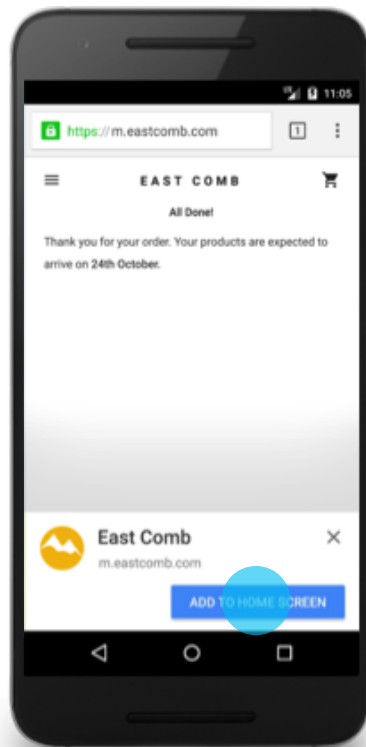
Automatic log in



Purchase with one  
click....



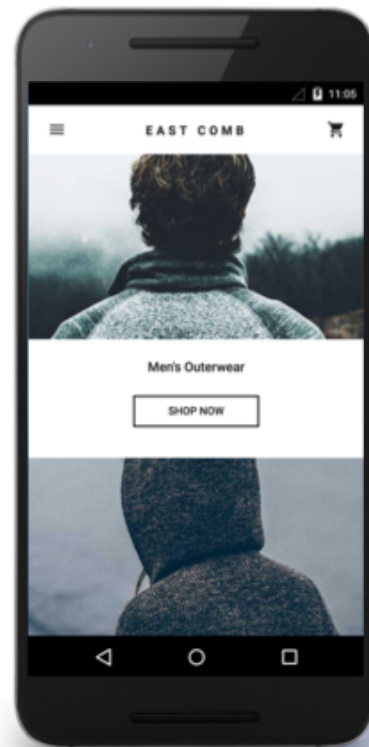
Shortcut to  
homescreen added



Easy access



...in full screen



# Walmart case study

+98% orders

The screenshot shows the Walmart Canada website desktop interface. The top navigation bar is blue with the Walmart logo and tagline 'Save money. Live better.' on the left, and links for Feedback, Help, Ad Choices, and Français on the right. Below this is a secondary navigation bar with icons for Stores, Flyers, Account, Lists, and Cart. A main navigation bar features a 'Shop All Departments' link, a list of top categories (Grocery, Pickup, Patio, Pools, Bikes, Swing Sets), a search bar with the placeholder 'What product are you looking for?', and a search button. The left sidebar contains a vertical list of department links: Appliances, Automotive, Baby, Clothing, Shoes & Accessories, Electronics, Furniture, Grocery, Health, Beauty & Pharmacy, Home, Jewellery & Watches, Movies, Music & Books, Office, Outdoor Living, Sports & Rec, and Toys. The main content area displays several promotional banners: 'Create your outdoor escape' with a 'Shop' button, 'Make a splash!' for swimming pools, 'Happy father's day' for SiriusXM, and a 'SAMSUNG' section for Father's Day featuring tablets and a smart TV with price tags.

The screenshot shows the Walmart Canada website mobile interface. The top navigation bar is blue with the Walmart logo and tagline 'Save money. Live better.' on the left, and links for Help, Ad Choices, and Français on the right. Below this is a secondary navigation bar with icons for Stores, Flyers, Account, Lists, and Cart. A main navigation bar features a 'Shop All Departments' link, a list of top categories (Grocery, Pickup, Patio, Pools, Bikes, Swing Sets), a search bar with the placeholder 'What product are you looking for?', and a search button.

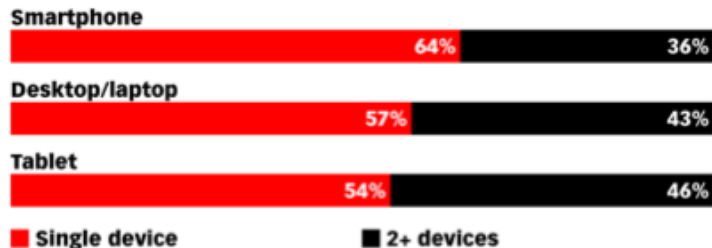
The screenshot shows a promotional banner for Samsung Father's Day on the Walmart mobile app. The banner features two Samsung tablets: the Tab E 9.6" priced at \$229.99 and the Tab A 8" priced at \$199.99. A 'Shop' button is located below the tablets. The text 'SAMSUNG Great Savings for Dad this Father's Day' is at the top, and a note at the bottom states '\*Local prices may vary. Click item for local price.'

The screenshot shows a promotional banner for swimming pools on the Walmart mobile app. The banner features a large image of a swimming pool with people swimming. The text 'Make a splash!' is prominently displayed, followed by 'Swimming Pools' and a list of pool brands: PFG, PFG, and PFG.

# Cross-device effect is rising. You need to reflect it in your assets and measurement strategy

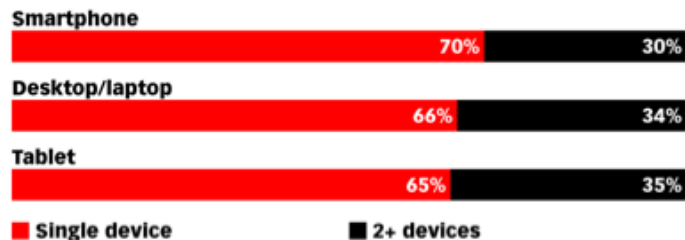
## Multidevice Share of Ecommerce Transactions in Australia, by Primary Device, Q4 2016

% of total



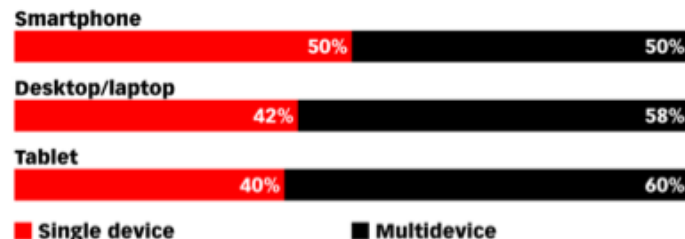
## Multidevice Share of Ecommerce Transactions in Germany, by Primary Device, Q4 2016

% of total



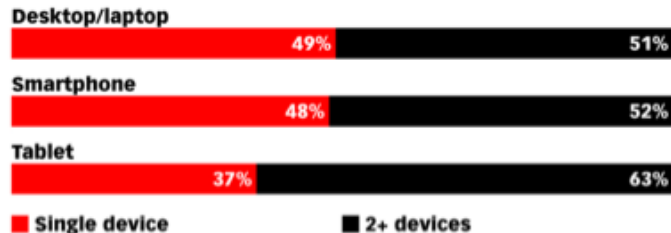
## Multidevice Share of Retail Ecommerce Transactions in Japan, by Primary Device, Q4 2016

% of total



## Multidevice Share of Ecommerce Transactions in South Korea, by Primary Device, Q4 2016

% of total





Help me buy  
Faster



Know  
me Better



WOW me  
Everywhere

Thank you

