



Mobile Web & Responsive Approach

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JOSH CLARK AND @GLOBALMOXIE PRESENT

CAGE MATCH



SENSATIONAL MAIN EVENT



HEAD
TO
HEAD



MOBILE WEB

VS

NATIVE
APPS

A: “We desperately must have a native app!”

B: “Why do we need that? Building a mobile web is a better approach in our case.”

A: “Because it’s cool and everyone has it! I want a native app!”

The App Store has reached 25 billion downloads. Thanks for getting us there.



Native isn't always better

Native app only	Both	Web app only
<ul style="list-style-type: none">▪ Gyroscope and Accelerometer▪ Accessing filesystems (e.g. address book, photos)▪ Fully-immersive experience (e.g. gaming)▪ Support in-app purchases (Apple takes 30% cut)▪ Camera▪ Smoother and more responsive	<ul style="list-style-type: none">▪ Store data offline▪ Access GPS▪ Have app-like UI and transitions▪ Accessible as app from home screen	<ul style="list-style-type: none">▪ Much easier to test, prototype, and rollout▪ Can update immediately (no app store approval), customers don't have to update the app▪ HTML 5 is continually adding hardware capabilities

**We still live in an app
culture... disposable app
culture**

**Download it, use it one,
forget about it, bin it**



There are good reasons to go with mobile web:

- **Cost / Effort**
- **Reach**
- **Links**
- **Complete control**

But... There are still good reasons to go native:

- When you have to use the hardware**
- When UX needs to be a differentiator**
- When you won't get found unless you're on the app store**
- (Many of us) live in app culture, albeit a disposable one**



**Let's talk about
mobile web now**

mobile web
is growing

8X

faster than
PC-based web

(Nielsen Online)

The web has always been a balancing act...



with many competing priorities.



Finding that balance is more difficult...





as device diversity increases.

Responsive web design offers us

H₄

O₁

P₃

E₁

for a sensible way to deal with device diversity.



And yet the one question I frequently ask myself is...

Can a one size fits all solution...

**ONE SIZE
FITS ALL**

A close-up photograph of a dark blue suit jacket with a red striped tie and a green measuring tape. The measuring tape is positioned vertically on the right side of the jacket, showing measurements from 18 to 23 inches. The tie is red with thin white diagonal stripes. The jacket has a subtle pattern and visible stitching.

**compete with a
tailored experience?**

<http://www.flickr.com/photos/helloturkeytoe/4932748746/>

Important question from many perspectives:

Search engine optimization

Context

Advertising

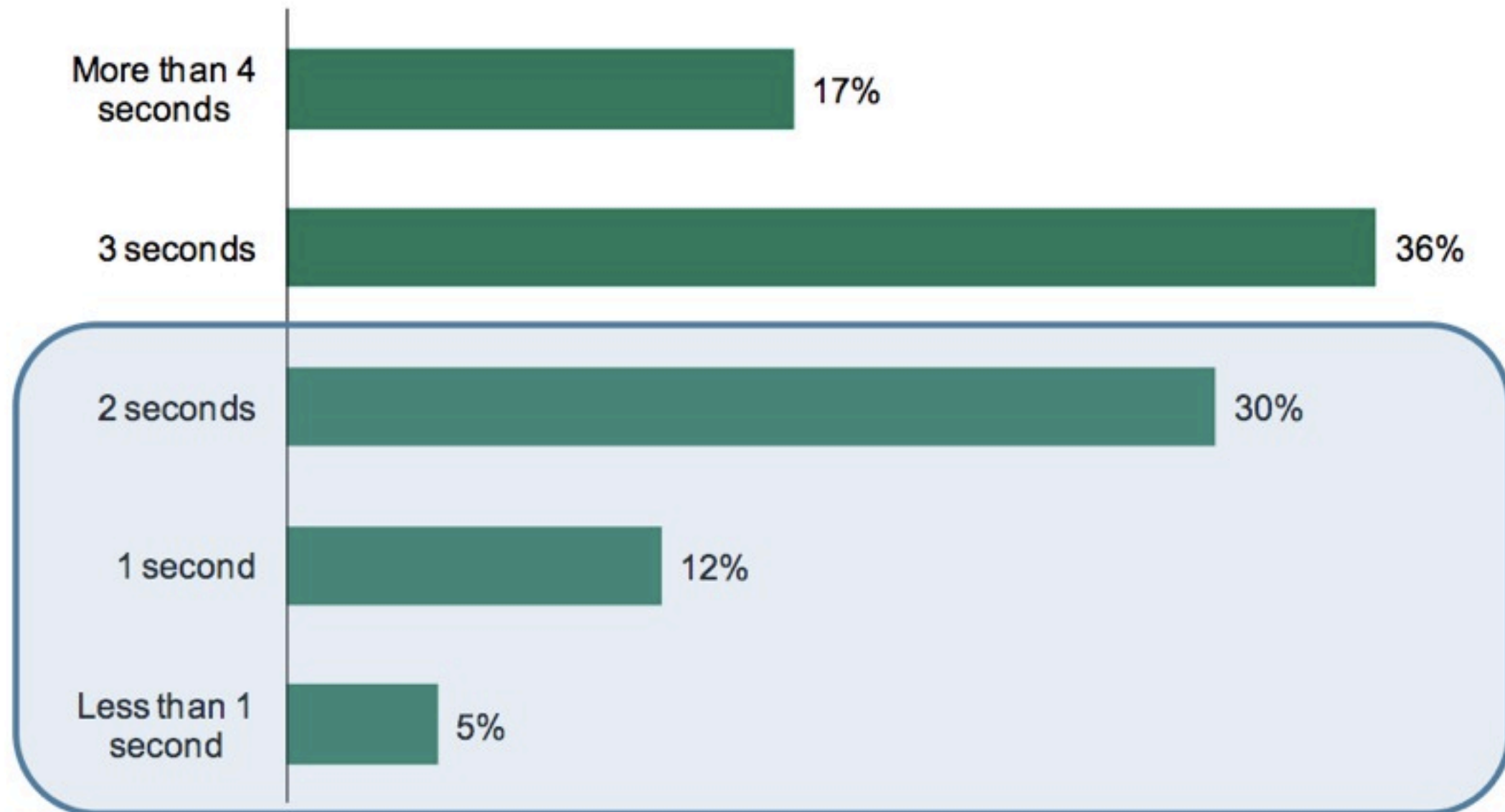
Performance

PERFORMANCE



People demand fast web sites.

“What are your expectations for how quickly a Web site should load when you are browsing or searching for a product?”



Slow sites mean real dollars are lost.



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Subscribe Reports Training Events Jobs Blog More Browse by topic

Home / Blog



The Subtle Science of Bidding
Understand the nuances of the SEM marketplace [Read Now](#)

67% of consumers cite slow websites as the main cause of basket abandonment

by David Moth 06 December 2012 11:40 8 comments [Print](#)

[Tweet](#) 236 [+1](#) 3 [Like](#) 14 [Share](#) 20



Everyone hates slow loading websites, and [a new survey](#) highlights just how damaging a slow site can be to the user experience.

The study by [Brand Perfect](#) found that two thirds of UK consumers (67%) cite slow loading times as the main reason they would abandon an online purchase.

It's a topic we've looked at in more detail in our post '[Site speed: case studies, tips and tools for improving your conversion rate](#)', with stats showing that slow loading websites are [losing businesses up to £1.73bn a year](#).

Daily Pulse Newsletter

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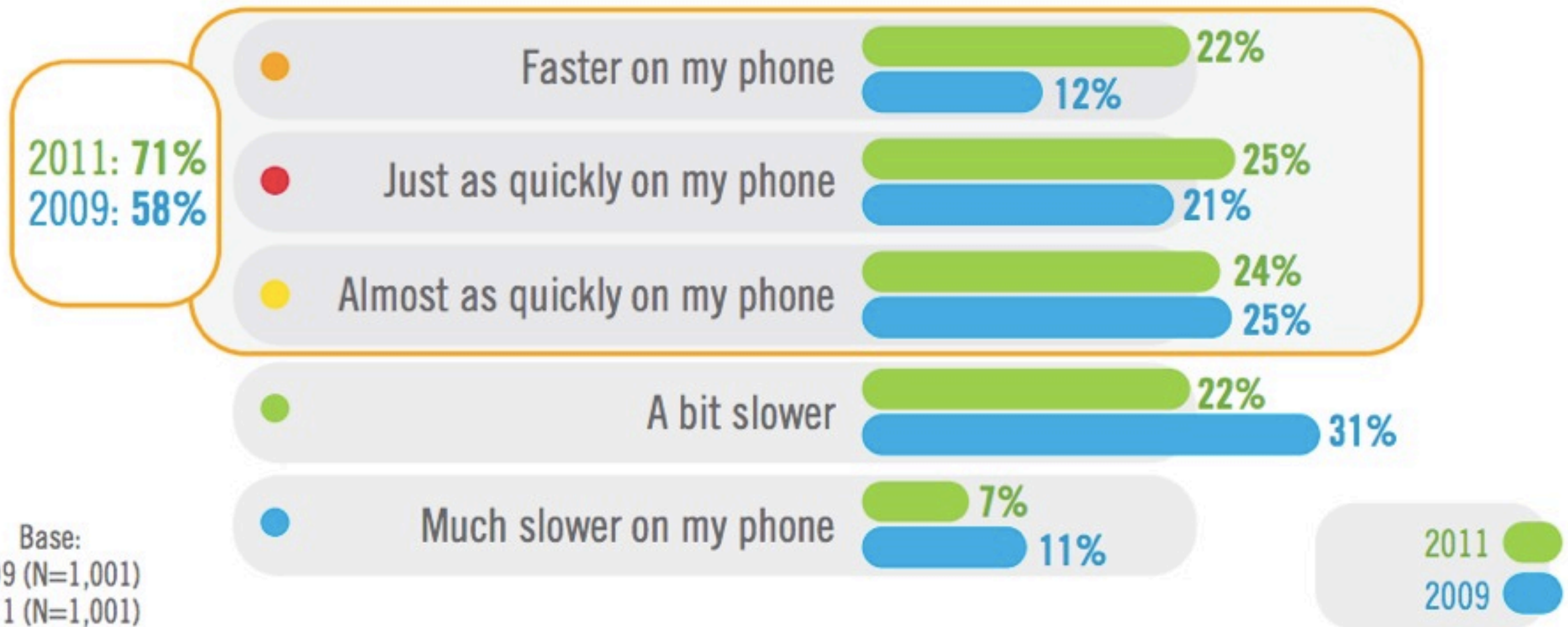
ecomonsters
ops 23 April, 2013 LONDON
learn more
OPS is the future of advertising
ADVERTISE HERE

Mobile users don't care that their network is slow.

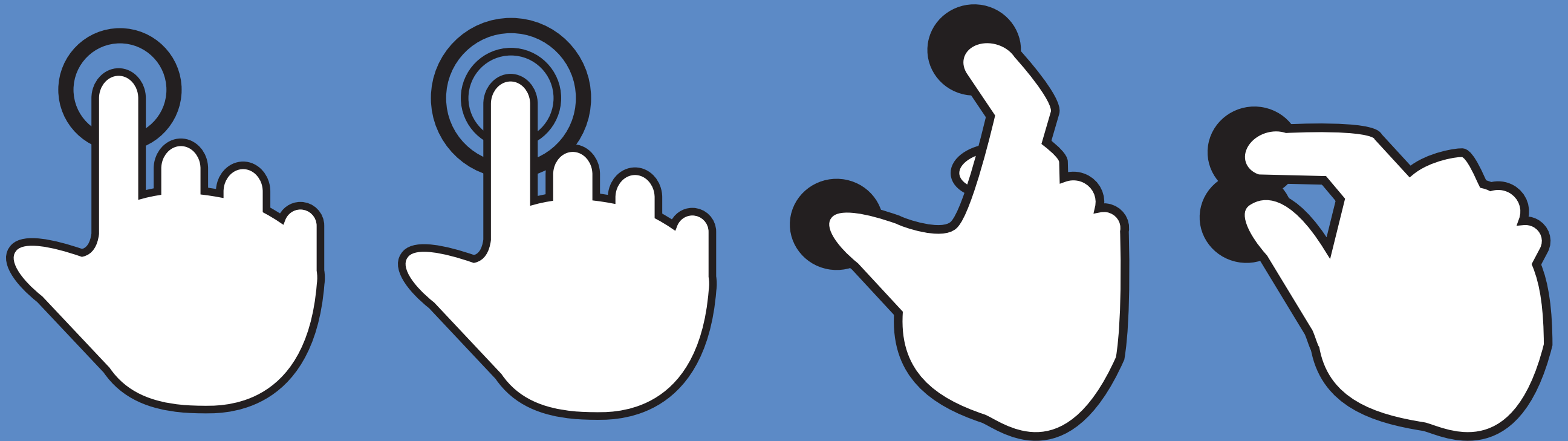


QUESTION:

Compared to websites that you access from your home computer or laptop, how quickly do you expect websites to finish loading on your mobile phone?



Many ways to navigate desktop web sites on mobile.



**There are no gestures that
can make a web site faster.**



**THIS
SUCKS**



DEXTER
BOYD
DEXTER
BOYD
DEXTER
BOYD



BBG: Before Boston Globe



A LIST APART

Responsive Web Design

by [ETHAN MARCOTTE](#) · May 25, 2010

Published in [CSS](#), [Layout & Grids](#), [Mobile/Multidevice](#), [Responsive Design](#), [Interaction Design](#) · [103 Comments](#)

“The control which designers know in the print medium, and often desire in the web medium, is simply a function of the limitation of the printed page. We should embrace the fact that the web doesn’t have the same constraints, and design for this flexibility. But first, we must ‘accept the ebb and flow of things.’”

—John Allsopp, *“A Dao of Web Design”*





The Baker Street
INQUIRER



THE
WEBLOGUE

BACK
ISSUES

ABOUT
OUR PAPER

“Give me problems, give me *work*.”

In the year 1878 I took my degree of Doctor of Medicine of the University of London, and proceeded to Netley to go through the course prescribed for surgeons in the army. Having completed my studies there, I was duly attached to the Fifth Northumberland Fusiliers as Assistant Surgeon. The regiment was stationed in India at the time, and before I could join it, the second Afghan war had broken out. On landing at Bombay, I learned that my corps had advanced through the passes, and was already deep in the enemy's country.

victors & villains



SHERLOCK
HOLMES



DR JOHN HEMISH
WATSON



MYCROFT
HOLMES



PROF JAMES
MORIARTY



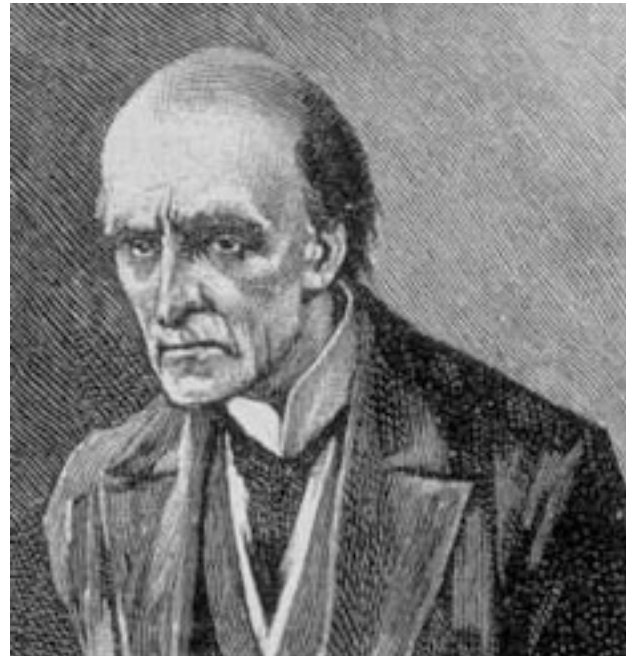
IRENE
ADLER



JAMES
WINTER

Illustrations by Sidney Paget, words by Sir Arthur Conan Doyle.

What remains is by Ethan Marcotte.







Original	Resized	K Saved	% Saved
34.7K	8.1K	26.6K	76.6%
39.0K	8.4K	30.6K	78.4%
30.5K	6.7K	23.8K	78.0%



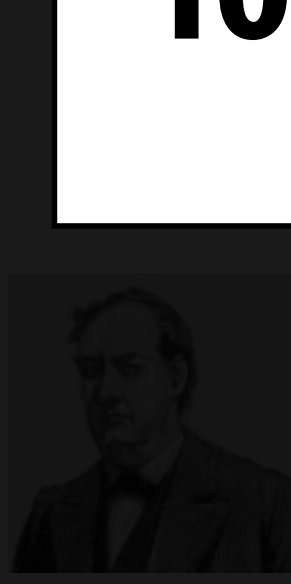
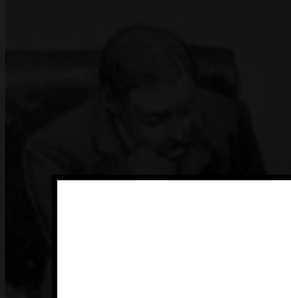
Original	Resized	K Saved	% Saved
43.4K	8.2K	35.2K	81.1%
26.0K	6.6K	19.4K	74.6%
34.7K	7.8K	26.9K	77.5%

Original	Resized	K Saved	% Saved
----------	---------	---------	---------

34.7K	8.1K	26.6K	76.6%
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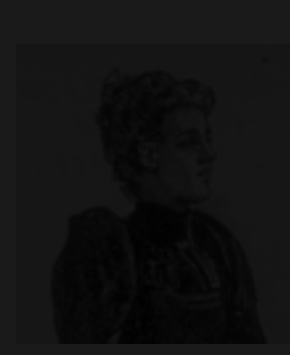
Original	Resized	K Saved	% Saved
----------	---------	---------	---------

43.4K	8.2K	35.2K	81.1%
-------	------	-------	-------



	Original	Resized	K Saved	% Saved
Total	208.3K	45.8K	162.5K	78.0%

30.5K	6.7K	23.8K	78.0%
-------	------	-------	-------



34.7K	7.8K	26.9K	77.5%
-------	------	-------	-------

The resounding answer from the community:

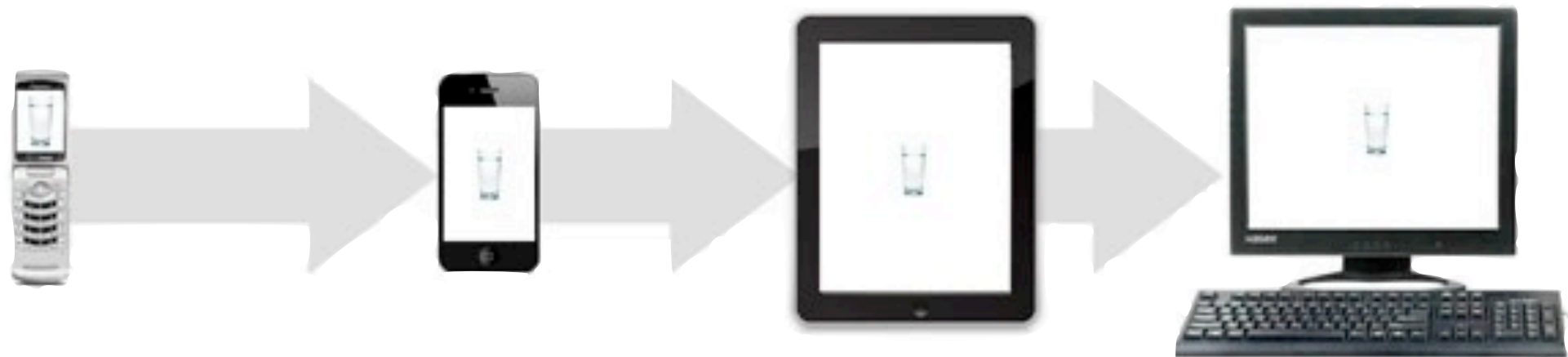
Mobile First Responsive Web Design

Mobile First Responsive Web Design

Graceful Degradation

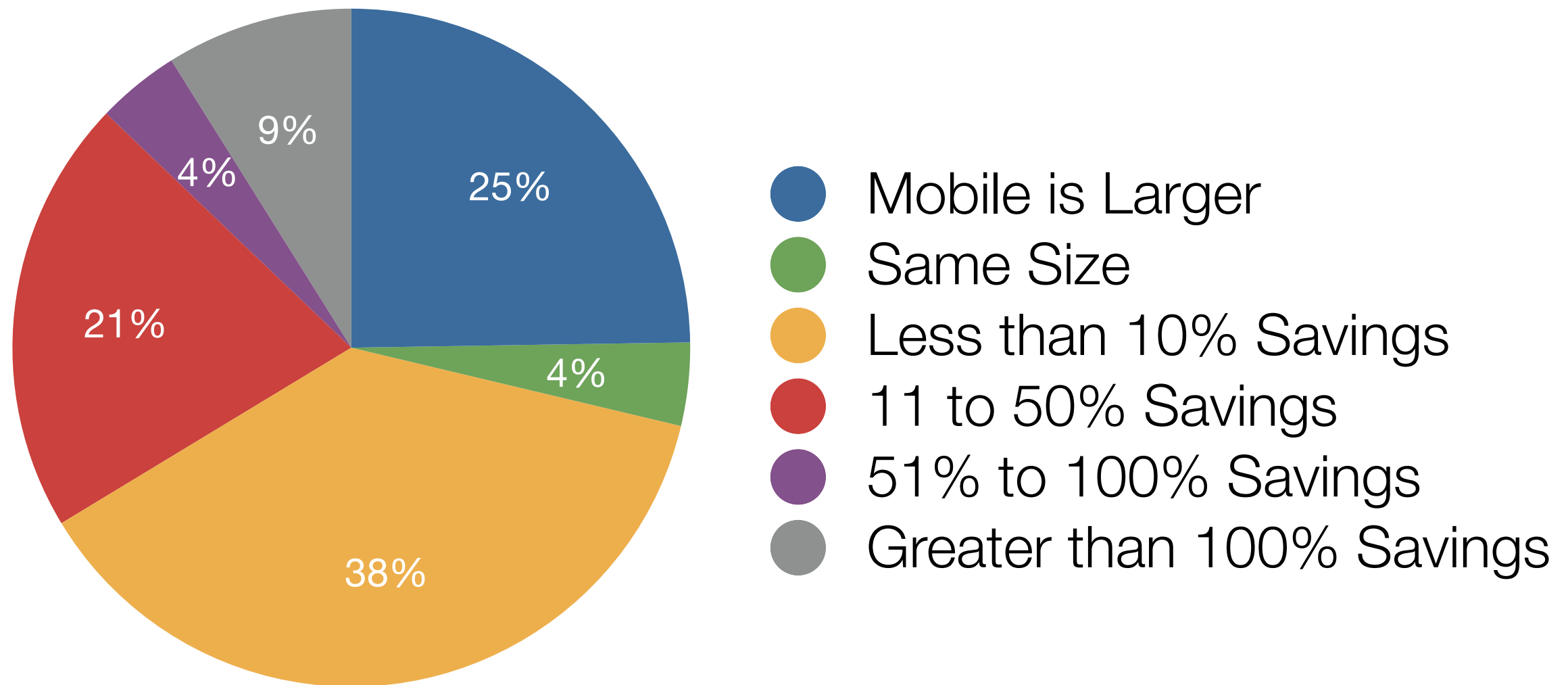


Progressive Enhancement



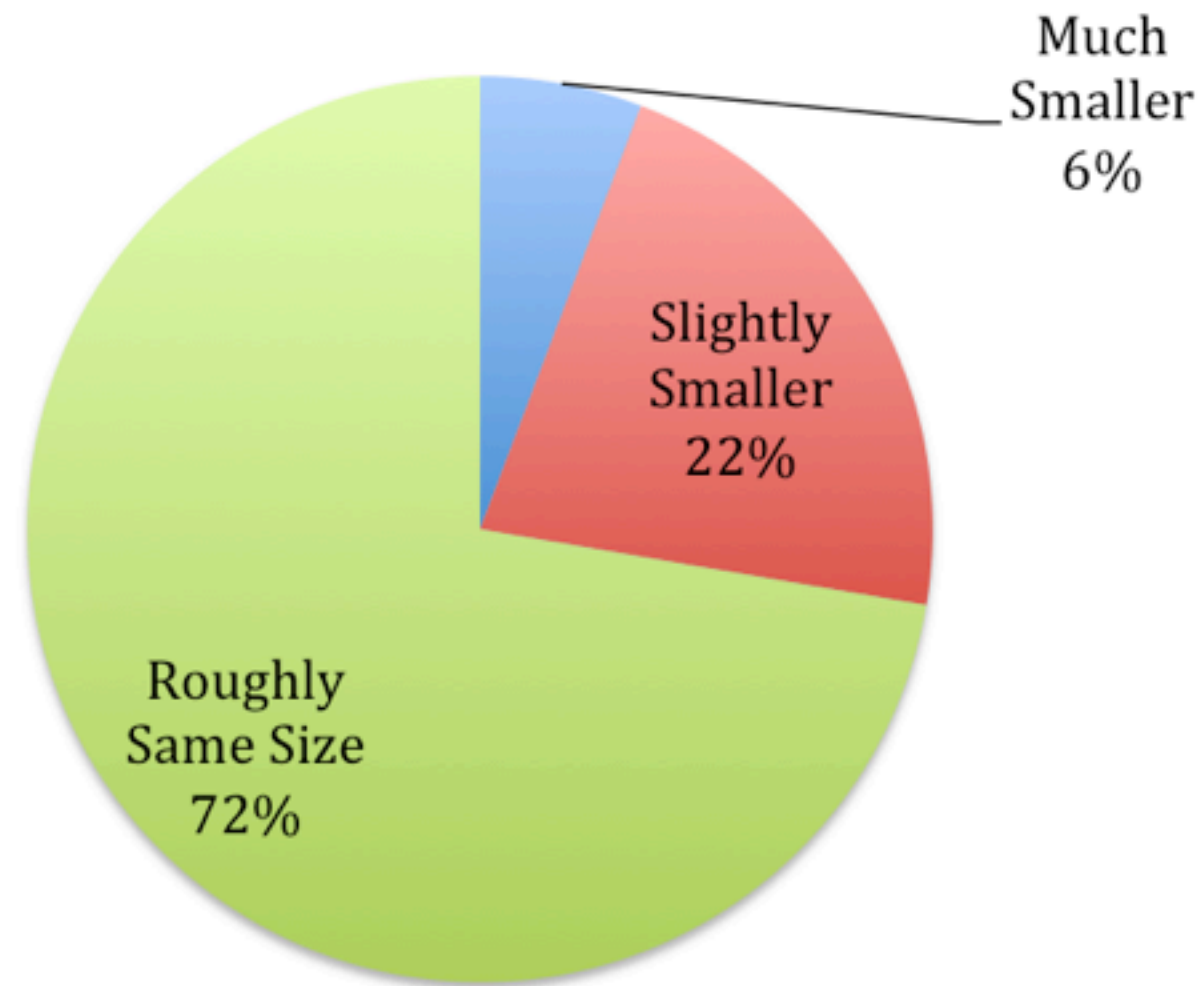
Where are the Mobile First RWDs?

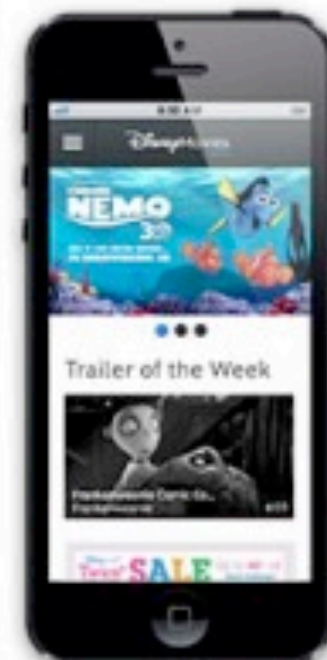
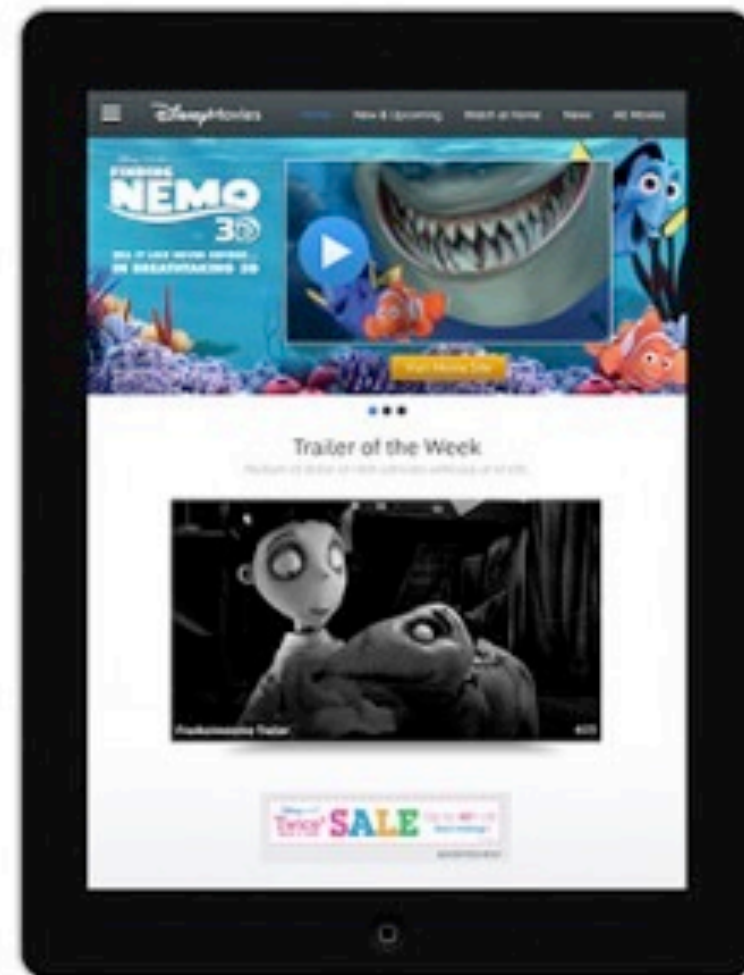
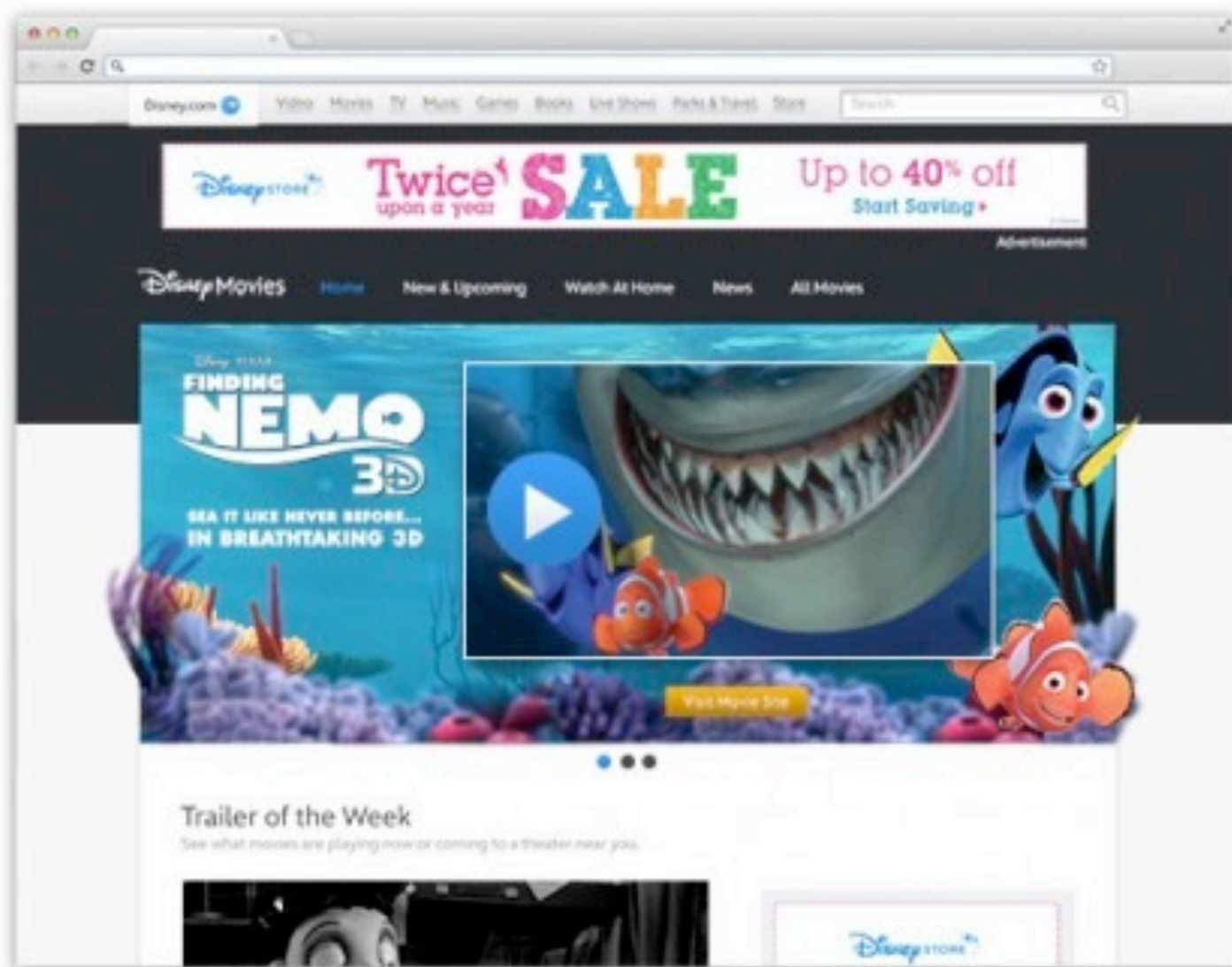
106 sites from mediaqueri.es tested



Guy Podjarny repeated the experiment

2013: 476 sites from mediaqueri.es tested



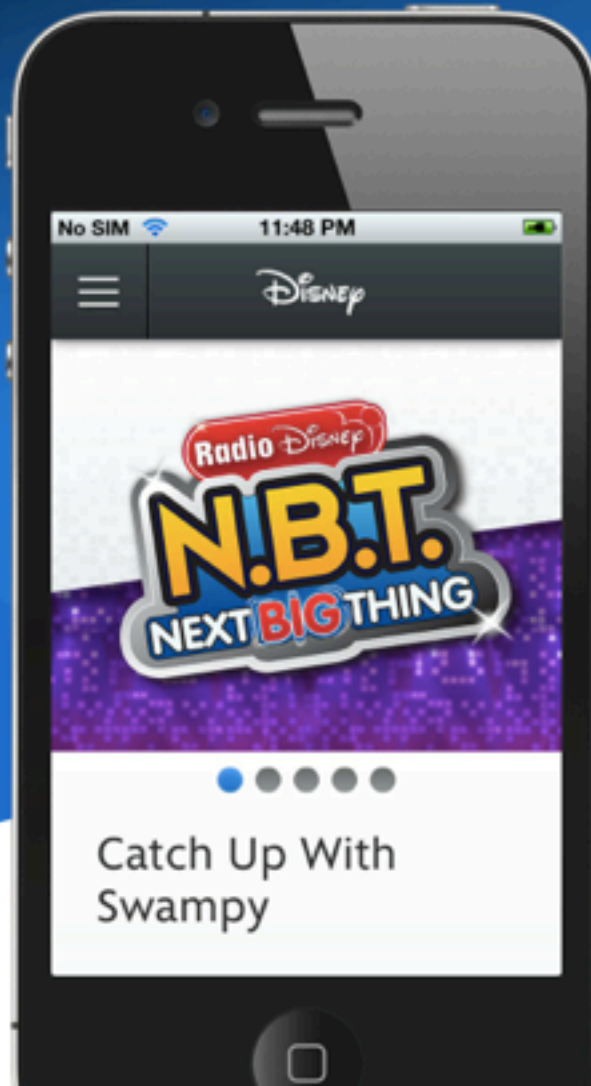


<http://www.thefoxisblack.com/2012/10/02/the-design-thinking-behind-the-new-disney-com/>



Test Your Website Performance On A Mobile Device

> Mobitest Form



Mobitest

Mobile Performance Results for:

<http://disney.go.com>

on iPhone 4, IOS 5.0



Your website's results:

Average Load Time

13.49s

Average Page Size

4382.87kb



Facebook



Tweet



ShareThis

> View HAR file

Register Now >

Already Registered? >

Mobitest

Mobile Performance Results for:

<http://disney.go.com>

on iPhone 4, IOS 5.0



Your website's results:

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Mobile Performance Results for:

<http://disney.go.com>

on iPhone 4, IOS 5.0




Your website's results:

Average Load Time

13.49s

Average Page Size

4382.87kb

 Facebook

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Most responsive web designs are...



YOU'RE DOING IT WRONG!

“

Being Responsive from a layout perspective should not preclude us from being **responsive from a performance and interaction perspective.**

—Scott Jehl

<https://twitter.com/scottjehl/status/243025352069349377>

”

A large, stylized blue number '5' is positioned on the left side of the image. It has a thick, rounded font style with a slight shadow effect.

**key techniques
for responsible
responsive design**

#1 Build Mobile First Responsive Designs



Different than Mobile First Design Theory

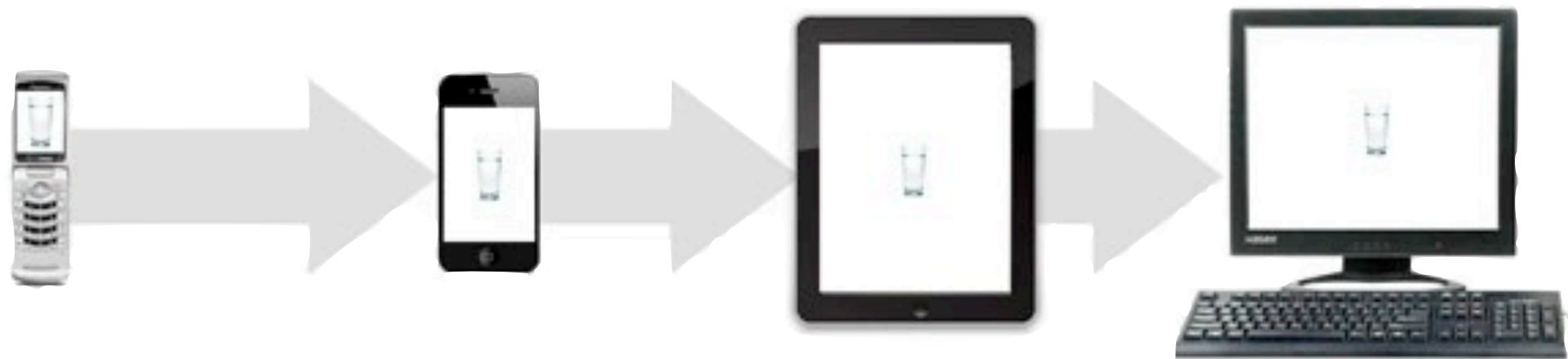


Mobile First Responsive Web Design is a technical approach for responsive designs.

Graceful Degradation



Progressive Enhancement



AND THE SURVEY SAYS... "Mobile First" Is A Dumb Strategy

Henry Blodget | Dec. 22, 2012, 11:12 AM | 8,665 | 24

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There has been a lot of talk over the past couple of years about how laptops and desktops are toast and everything's going mobile.

As a result, the prevailing wisdom is that companies should become:

- **"Mobile Only"** (just forget big screens, keyboards, and mice--they're dead)

Or, at least,

- **"Mobile First"** (design everything for smartphones first and big screens as an afterthought)

For some mobile-centric companies--Instagram, location-based apps, mobile games--these strategies obviously make sense. The applications the companies offer are centered on mobile gadgets.

For other companies, however--including some news and information companies that are frantically redesigning their businesses to focus on "Mobile First"--the strategy seems misguided.

The smarter strategy, I think, is this:

- **"Mobile, Too"**

With the explosive growth of smartphones, tablets, and super-sleek laptops, mobile usage

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Your Email Address

[SIGN-UP](#)

[Learn More »](#)

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brainshark [Learn More →](#)

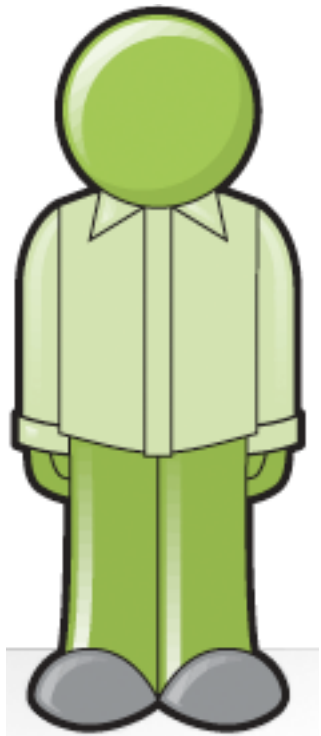
LinkedIn [Login](#)

Hot: [LinkedIn](#) In your network

 **The 25 Best-Paying Companies For Software Engineers** [Share](#) 907

 Novartis CEO

Luke's Take on Mobile First



Growth = **Opportunity**

Constraints = **Focus**

Capabilities = **Innovation**

How do I make this responsive?

Reimbursements

Mileage

Pharmacy/other medical

Meals

Lodging

Reimbursement of expenses

Please complete this form and submit it. We will return incomplete requests for more information.

Reimbursement must be requested within two years from date of service.

Reimbursement requests can take up to 30 days to be processed.

I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

Print

Reset

Submit

Mileage	\$86.58
Pharmacy/other	\$7.50
Meals	\$550.51
Lodging	\$0.00
Total	\$644.59

How do I make this responsive?

Reimbursements

Mileage

Pharmacy/other medical

Meals

Lodging

Mileage

0.5550 cents per mile effective 4/17/2012. Gas receipts are not necessary.

Click Add to get started

Add

Edit

Copy

Delete

[Need help?](#)

Travel date	Start location	End location	Medical purpose	Miles	Total miles	Amount
8/1/2012	123 Johnson Ave, Salem, OR 97317	440 Mission St, Salem, OR 97301	Doctor	12	12	\$6.66
9/1/2012	123 Johnson Ave, Salem, OR 97317	440 Mission St, Salem, OR 97301	Other	30	60	\$33.30
9/3/2012	123 Johnson Ave, Salem, OR 97317	440 Mission St, Salem, OR 97301	IME	30	60	\$33.30
9/4/2012	123 Johnson Ave, Salem, OR 97317	440 Mission St, Salem, OR 97301	Hospital	12	24	\$13.32

I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

Print

Reset

Submit

Mileage	\$86.58
Pharmacy/other	\$7.50
Meals	\$550.51
Lodging	\$0.00
Total	\$644.59

How do I make this responsive?

Reimbursements Mileage Pharmacy/other medical Meals Lodging

Mileage ×

*Required fields

Travel date* (mm/dd/yyyy)

Start location* (Address, city, state, zip)

End location* (Business, address, city, state, zip)

Medical purpose

Miles* [Google maps](#)

Trip type

Total miles

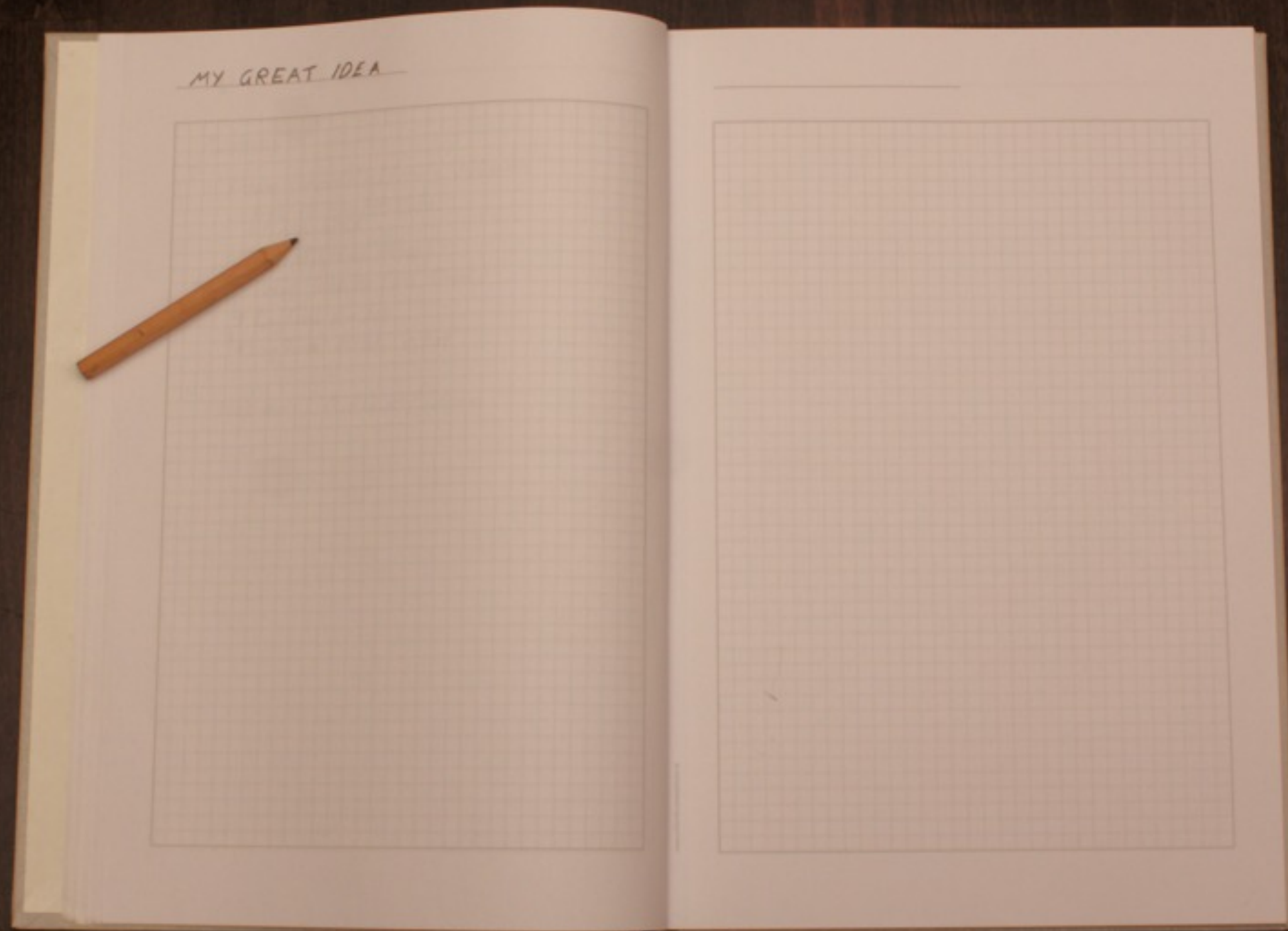
I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

	Amount
2	\$6.66
0	\$33.30
0	\$33.30
4	\$13.32

Mileage	\$86.58
Pharmacy/other	\$7.50
Meals	\$550.51
Lodging	\$0.00
Total	\$644.59



Ok, let's start from a clean slate



What would the mobile version look like?

iPhone 3G 21:23

Expense Reimbursement

Please complete this form and submit it. We will return incomplete requests for more information.

Mileage	\$86.58	>
Pharmacy/other	\$7.50	>
Meals	\$550.51	>
Lodging	\$0.00	>

Total **\$644.59**

I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

iPhone 3G 21:23

Mileage

0.5550 cents per mile effective 4/17/2012. Gas receipts are not necessary.

Doctor 8/1/2012	\$6.66 12 Miles	>
Hospital 12/31/2012	\$33.30 60 Miles	>
IME 8/1/2012	\$13.32 24 Miles	>

iPhone 3G 21:23

Mileage

Travel Date	8/1/2012	>
Start Location	440 Mission St. Salem, OR 97301	>
End Location	440 Mission St. Salem, OR 97301	>
Medical Purpose	Doctor	>
Miles	12	>
Trip Type	One way	>

Total miles 12

How does that map to desktop design?

iPhone 3G 21:23

Expense Reimbursement

Please complete this form and submit it. We will return incomplete requests for more information.

Mileage	\$86.58	>
Pharmacy/other	\$7.50	>
Meals	\$550.51	>
Lodging	\$0.00	>

Total **\$644.59**

I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

Reimbursements Mileage Pharmacy/other medical Meals Lodging

Reimbursement of expenses

Please complete this form and submit it. We will return incomplete requests for more information.

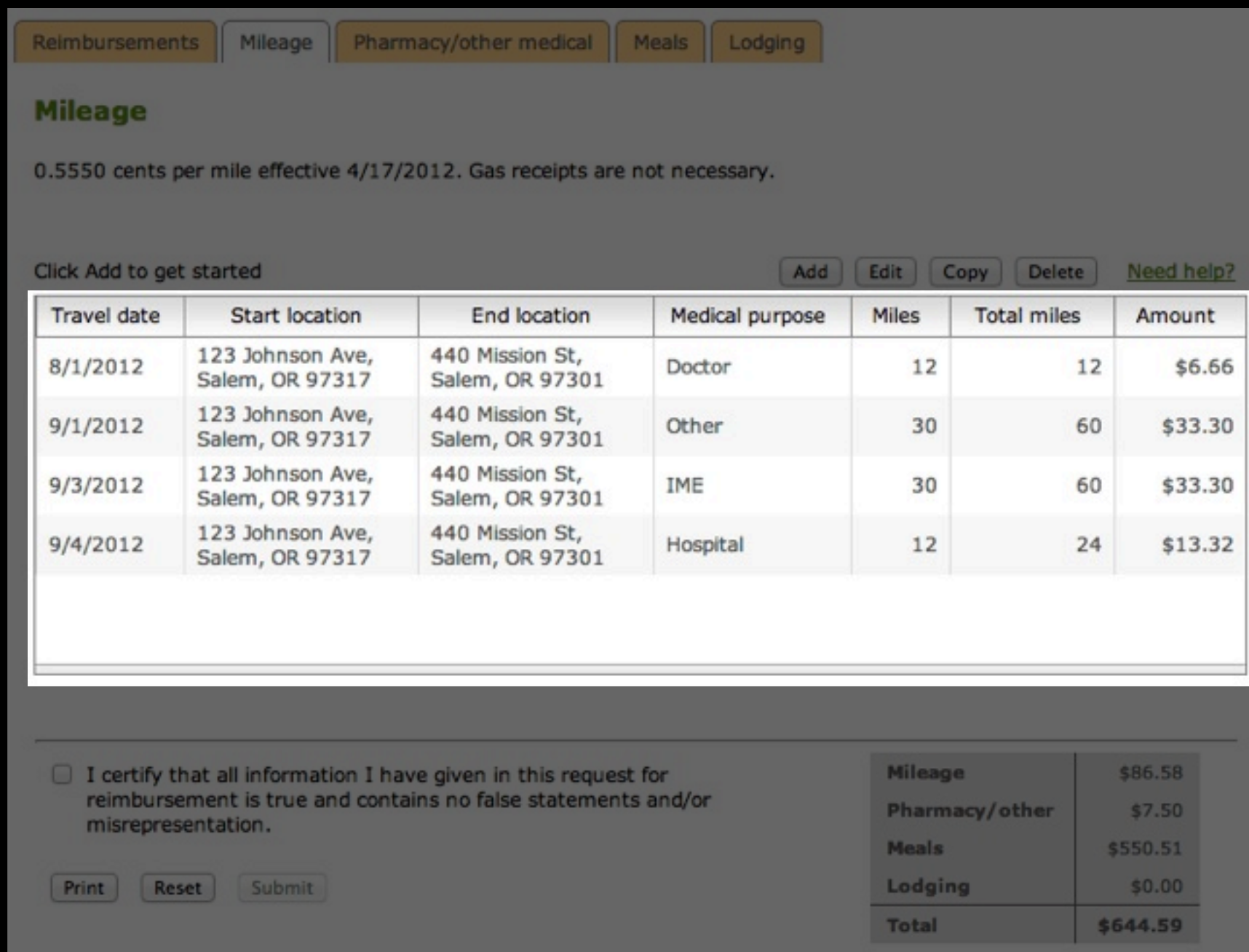
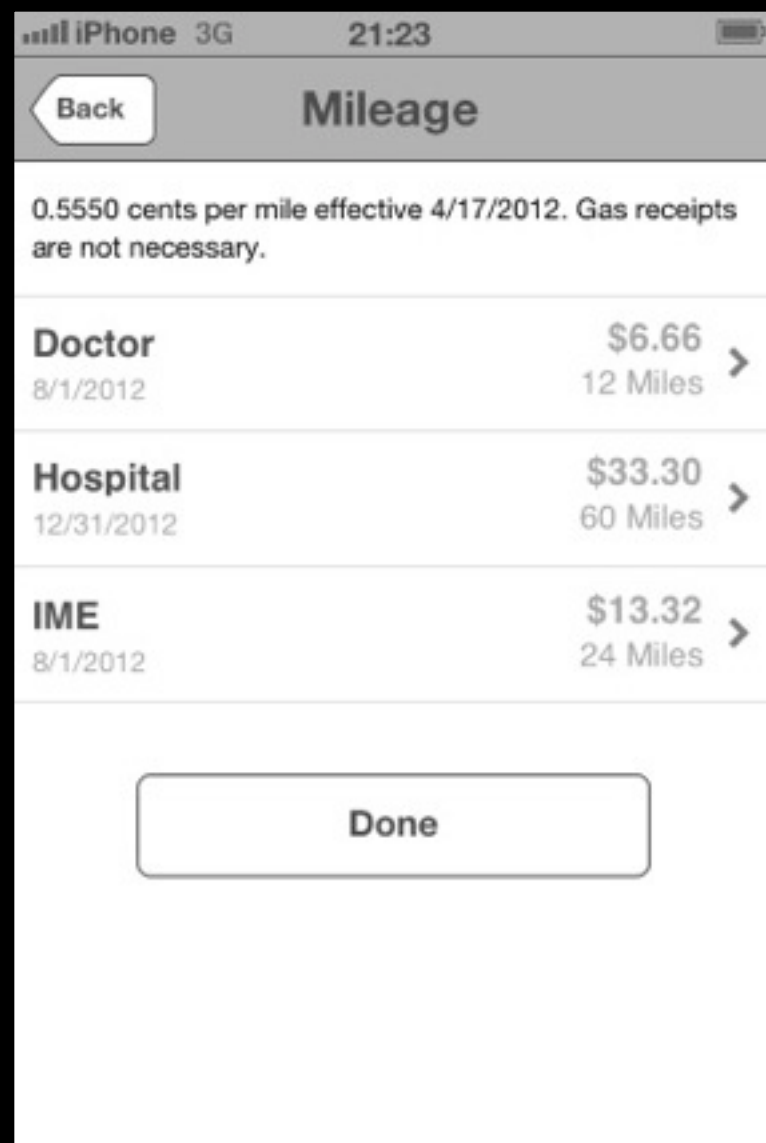
Reimbursement must be requested within two years from date of service.

Reimbursement requests can take up to 30 days to be processed.

I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

Mileage	\$86.58
Pharmacy/other	\$7.50
Meals	\$550.51
Lodging	\$0.00
Total	\$644.59

How does that map to desktop design?



How does that map to desktop design?

iPhone 3G 21:23

Back Mileage

Travel Date 8/1/2012 >

Start Location 440 Mission St. Salem, OR 97301 >

End Location 440 Mission St. Salem, OR 97301 >

Medical Purpose Doctor >

Miles 12 >

Trip Type One way >

Total miles 12

Delete Save

Reimbursements Mileage Pharmacy/other medical Meals Lodging

Mileage x

0.555

*Required fields

Travel date* 8/1/2012 (mm/dd/yyyy)

Start location* 123 Johnson Ave, Salem, OR (Address, city, state, zip)

End location* 440 Mission St, Salem, OR 97 (Business, address, city, state, zip)

Medical purpose Doctor

Miles* 12 [Google maps](#)

Trip type One-way

Total miles 12

Save

Click A

Trav

8/1/

9/1/

9/3/

9/4/

Need help?

	Amount
2	\$6.66
0	\$33.30
0	\$33.30
4	\$13.32

I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

Print Reset Submit

Mileage	\$86.58
Pharmacy/other	\$7.50
Meals	\$550.51
Lodging	\$0.00
Total	\$644.59

Can this desktop version be better using what we've learned from the mobile version?

Reimbursements | Mileage | Pharmacy/other medical | Meals | Lodging

Reimbursement of expenses

Please complete this form and submit it. We will return incomplete requests for more information.

Reimbursement must be requested within two years from date of service.

Reimbursement requests can take up to 30 days to be processed.

I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

Mileage	\$86.58
Pharmacy/other	\$7.50
Meals	\$550.51
Lodging	\$0.00
Total	\$644.59

Expense Reimbursement Form

Please complete this form and submit it. We will return incomplete requests for more information.

0.5550 cents per mile effective 4/17/2012. Gas receipts are not necessary.

Mileage	\$86.58 >
Pharmacy/other	\$7.50 >
Meals	\$550.51 >
Lodging	\$0.00 >
Total	\$644.59

Travel date	Start location	End location	Medical purpose	Miles	Total miles	Amount
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9/1/2012	123 Johnson Ave, Salem, OR 97317	440 Mission St, Salem, OR 97301	Other	30	60	\$33.30
9/3/2012	123 Johnson Ave, Salem, OR 97317	440 Mission St, Salem, OR 97301	IME	30	60	\$33.30
9/4/2012	123 Johnson Ave, Salem, OR 97317	440 Mission St, Salem, OR 97301	Hospital	12	24	\$13.32
9/19/2012	123 Johnson Ave, Salem, OR 97317	440 Mission St, Salem, OR 97301	Hospital	20	40	\$22.20

Add

Edit

Copy

Delete

I certify that all information I have given in this request for reimbursement is true and contains no false statements and/or misrepresentation.

Submit

Mobile First

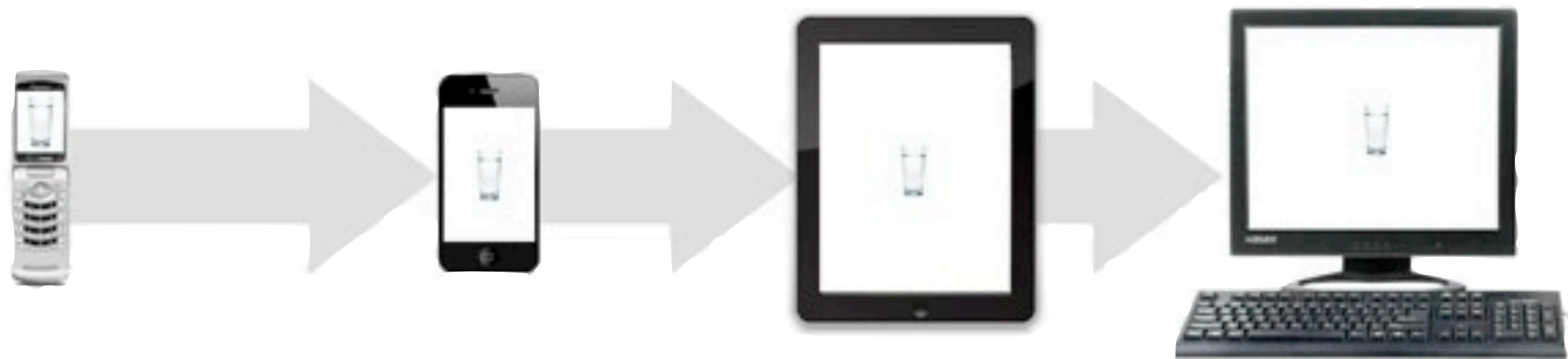
This is why *Mobile First* thinking is so powerful even on projects that are currently implemented on the desktop.

Mobile First Responsive Web Design is a technical approach for responsive designs.

Graceful Degradation



Progressive Enhancement



Reorder media queries so cascade goes from small to large screens

```
/* Wider viewports/higher resolutions (e.g. desktop) */  
@media screen and (min-width:481px) {  
  [Desktop layout rules here]  
}  
  
/* Mobile/lower-resolution devices */  
@media screen and (max-width:480px) {  
  [Mobile layout rules here]  
}
```

Move the mobile media query block above the desktop media query. By doing this, we're making sure the cascading effect of CSS is consistent with our mobile first progressive enhancement approach.

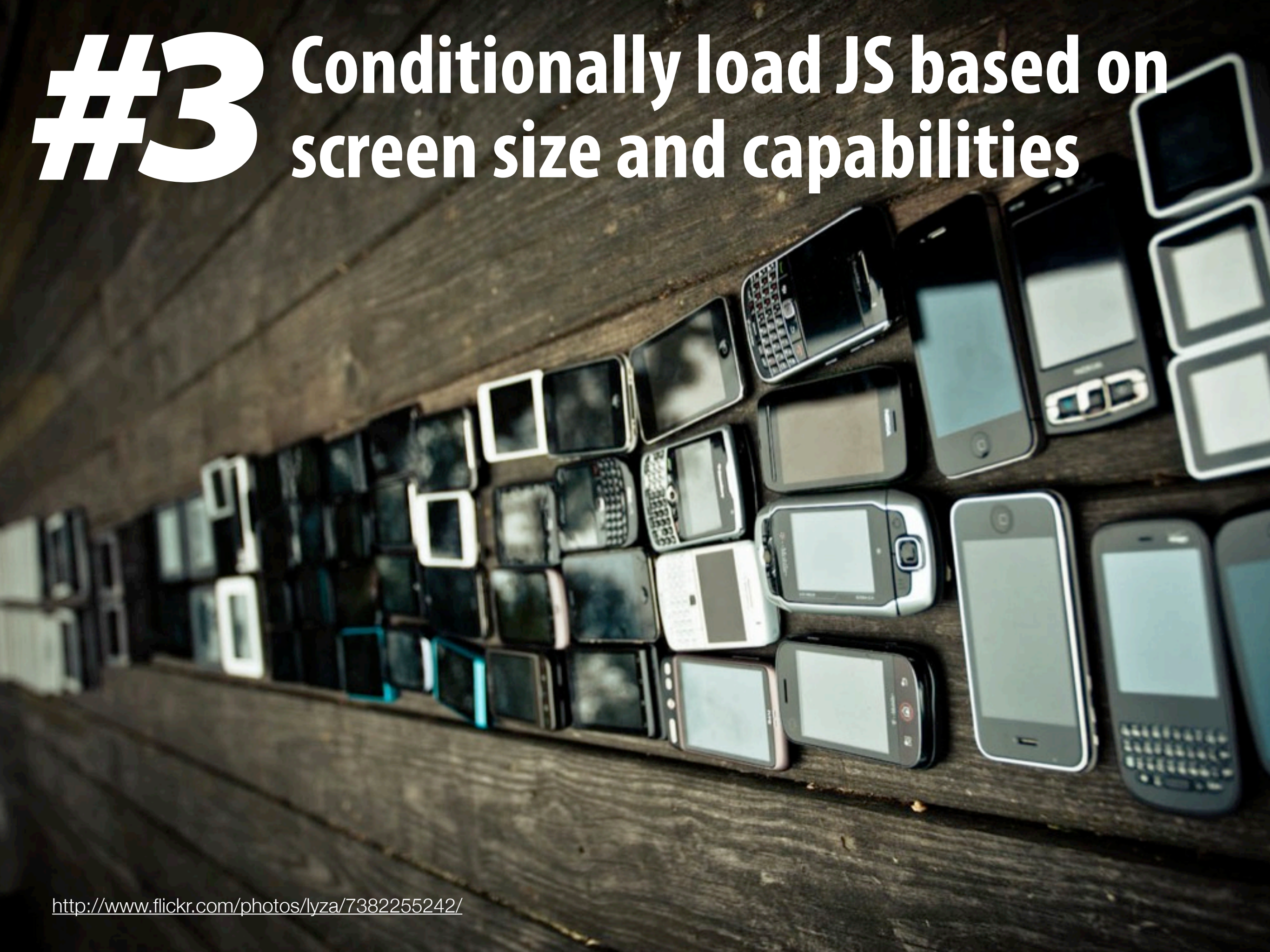
Keep basic styles outside of media queries.

#2



**Keep CSS
images in
their place**

#3 Conditionally load JS based on screen size and capabilities



#4 Deliver different size s at different screen sizes



One SRC to rule all images

There are 16 beer labels on the On Tap Now page that use an img tag like this one for the Bensons Bubbler.

Despite the need for multiple versions of this image depending on the screen size, HTML only allows one value for the src.

```

```


Two most common use cases

Resolution Switching

Includes high-density (retina) images.



Art direction



<http://www.flickr.com/photos/barackobamadotcom/5795228030/>

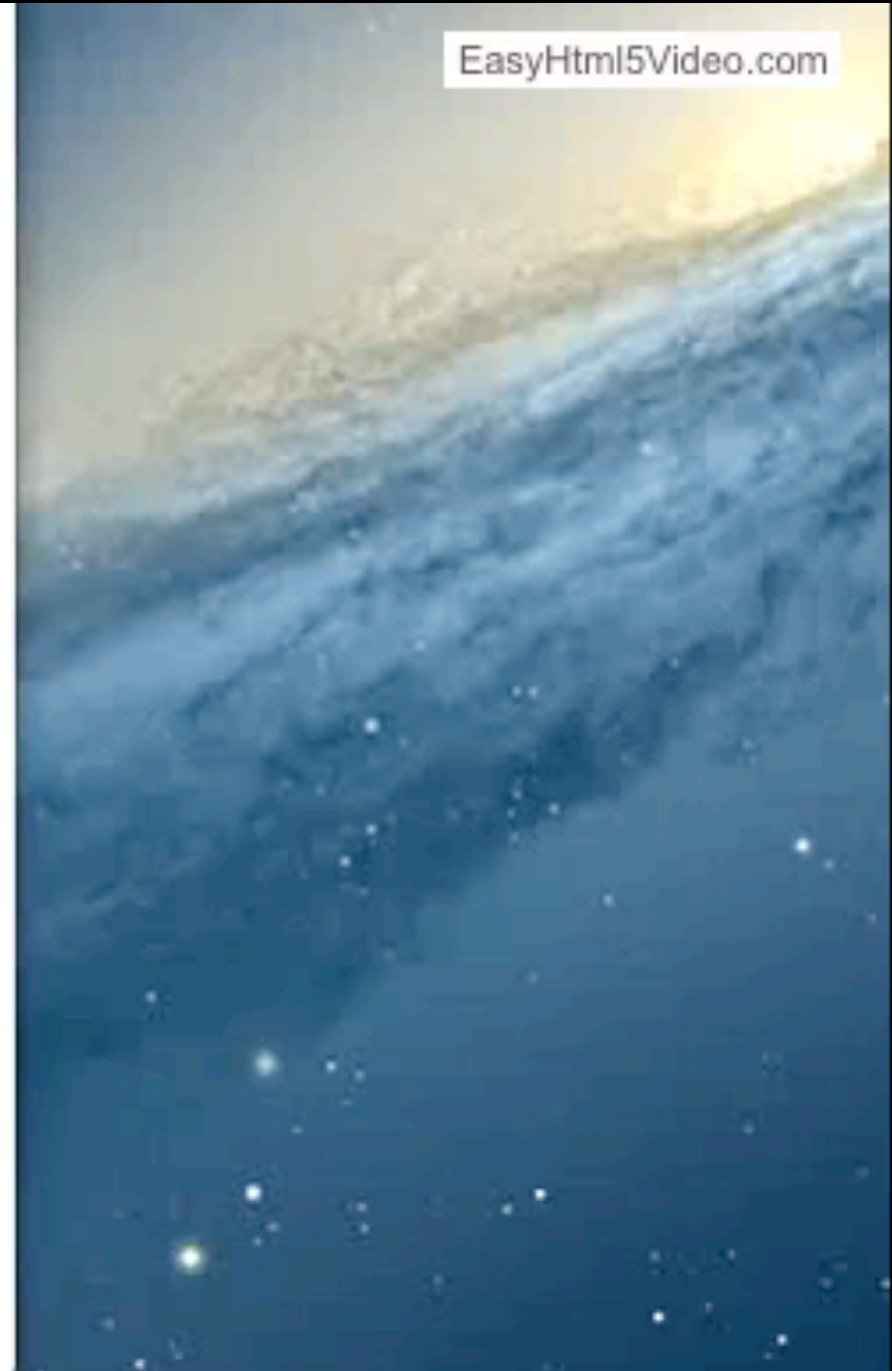
Not simply cropping



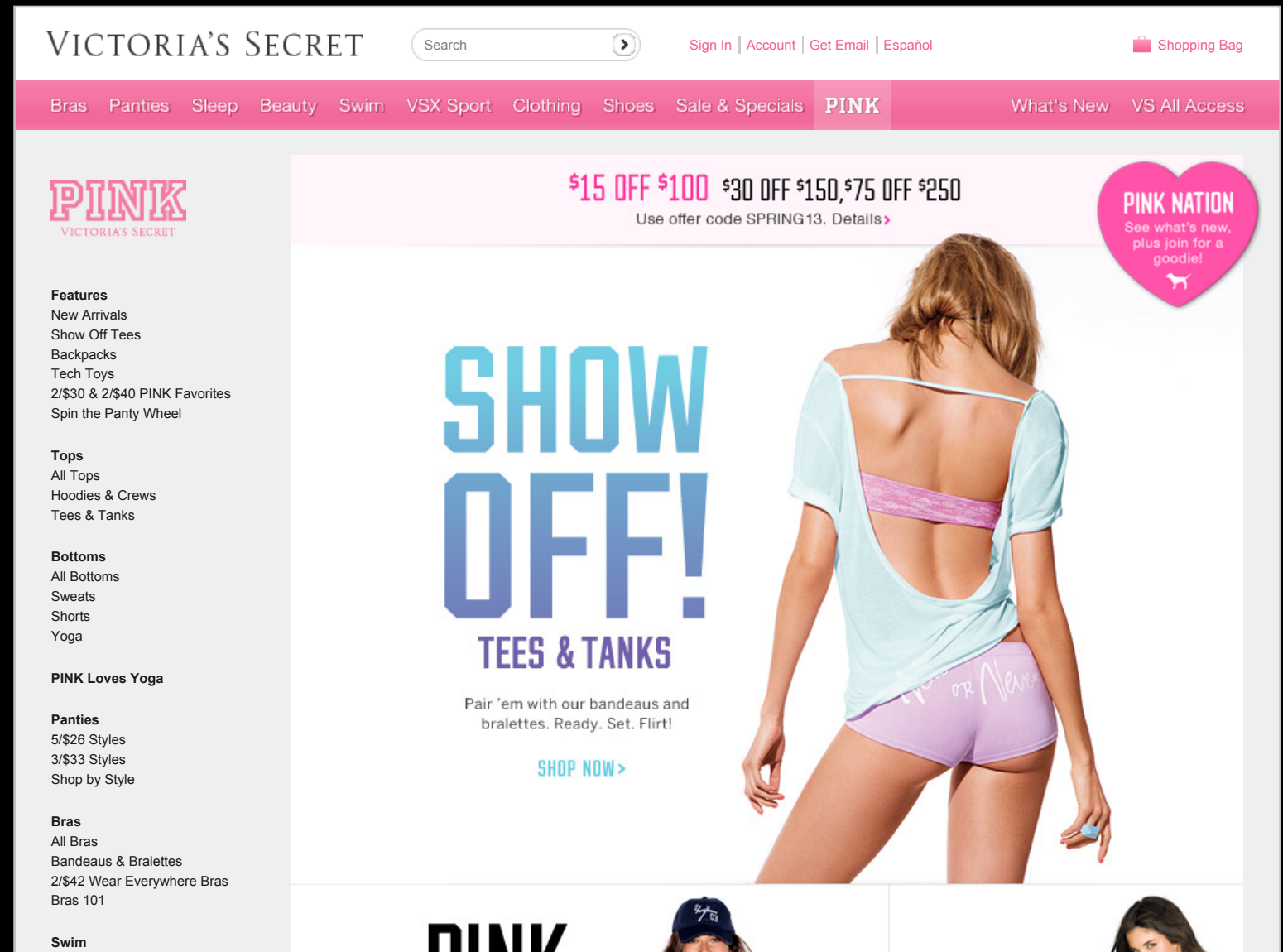
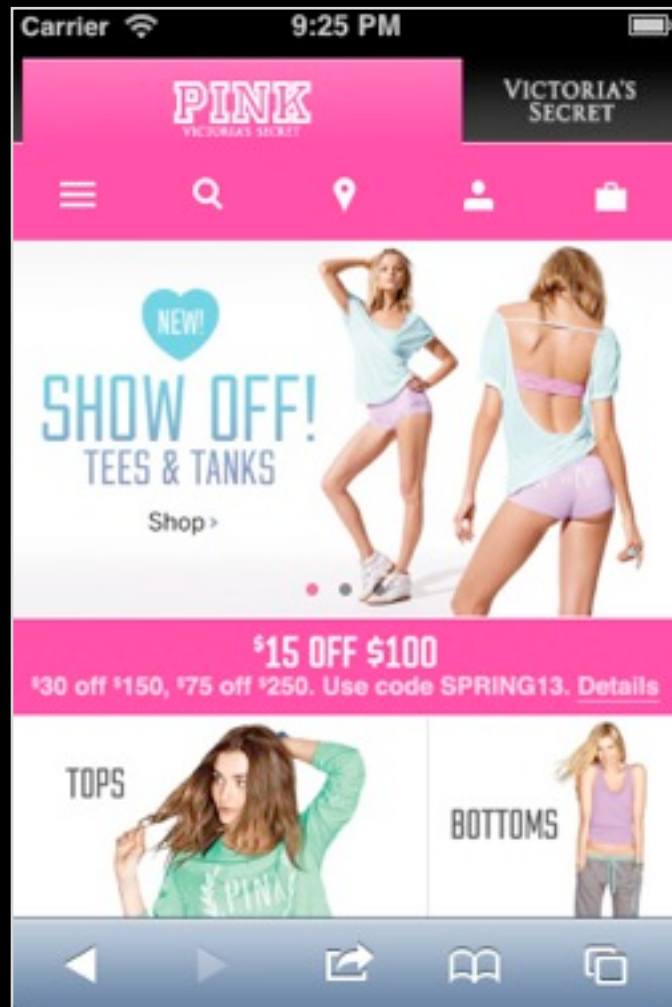
Browser for MeeGo

Our fastest browser ever, Browser for MeeGo introduces new gestures designed to make one-handed browsing

EasyHtml5Video.com



Art direction: Images with text



Things are still moving forward on a standards-based approach for responsive images.

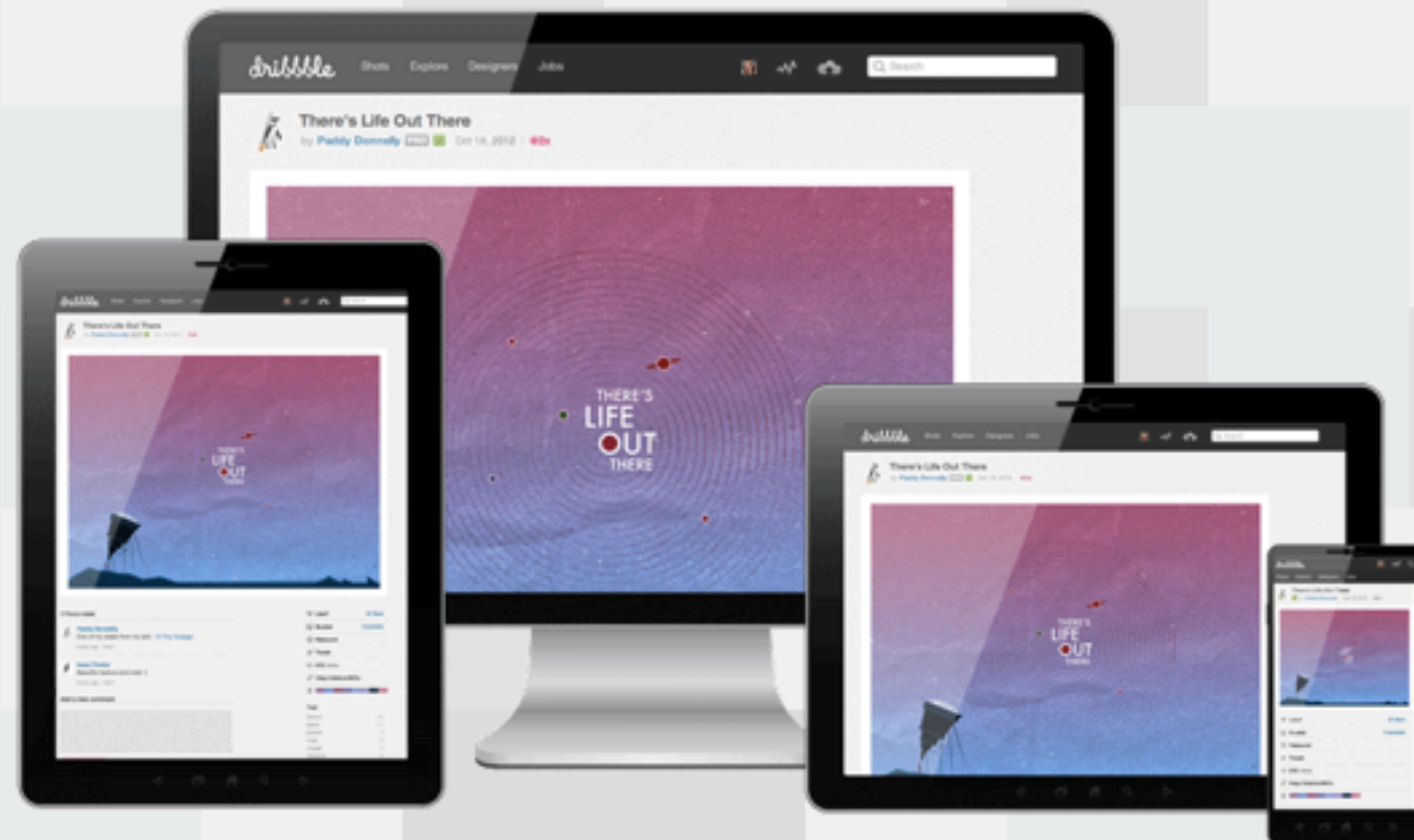


RICG

RESPONSIVE IMAGES COMMUNITY GROUP

We're a group of developers working towards a markup-based means of delivering alternate image sources based on device capabilities to prevent wasted bandwidth and optimize display for both screen and print.

JOIN US!



[Dribbble.com](https://dribbble.com) is using the `picture` markup pattern.

WHAT IS THE `PICTURE` ELEMENT?

The `picture` element is a markup pattern that allows developers to declare multiple sources for an image. By using media queries, it gives developers control as to when and if those images are presented to the user.

SAMPLE MARKUP FOR `PICTURE`

```
<picture>
  <source media="(min-width: 40em)" srcset="big.jpg 1x, big-hd.jpg 2x">
  <source srcset="small.jpg 1x, small-hd.jpg 2x">
  
</picture>
```

[Read the `picture` Specification](#)

WHAT IS THE `SRCSET` ATTRIBUTE?

The `srcset` attribute is an extension to the existing `img` tag that provides some of the functionality of the `picture` element. It uses a more concise syntax, part of which can be used by the `picture` element.

SAMPLE MARKUP FOR `SRCSET`

```

```

[Read the `srcset` Specification](#)

#5 Handle high-density images carefully

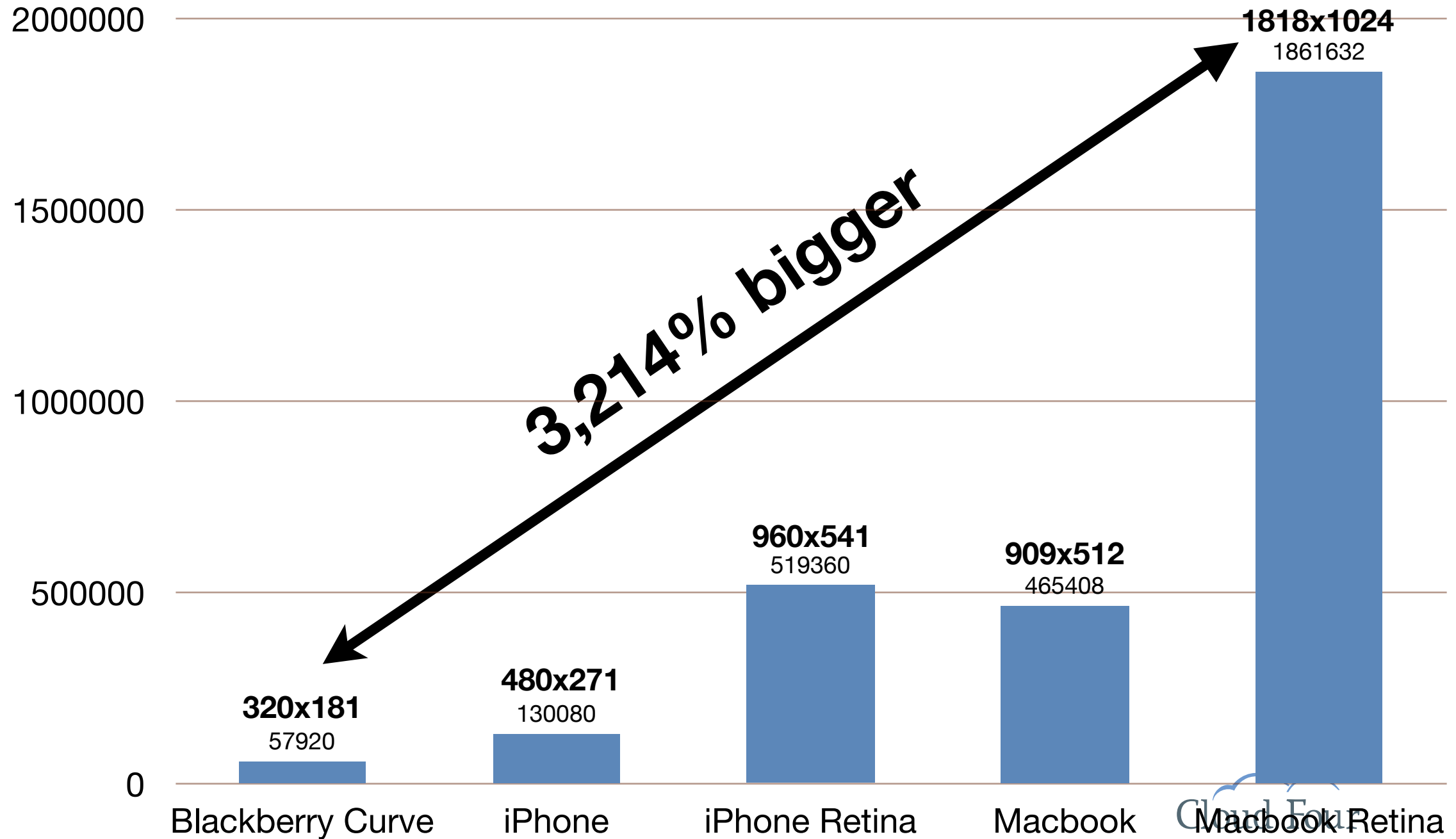


A single image on multiple screens





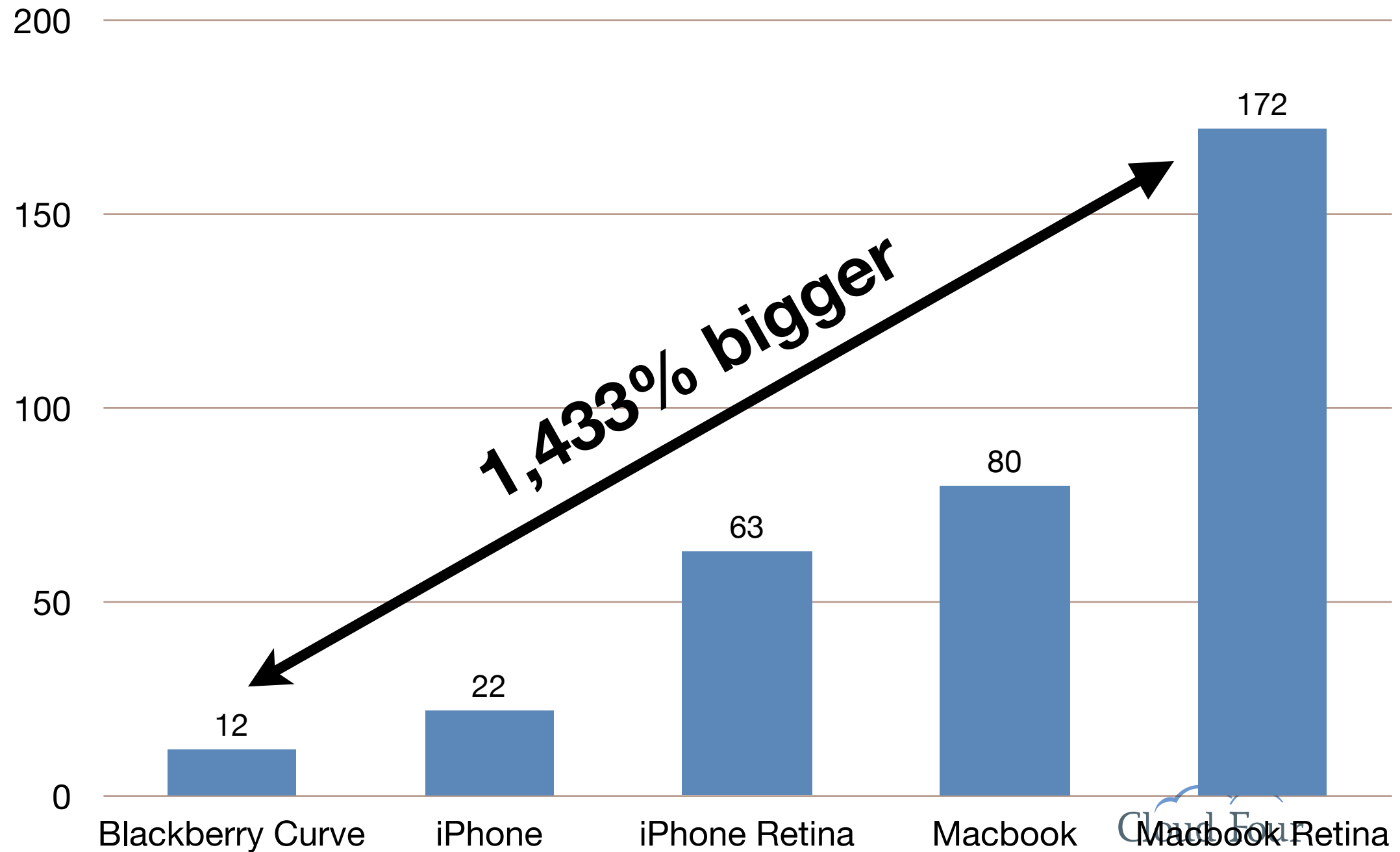
Image Resolution



Cloud Four



JPEG Compressed (k)



Downloads both standard and retina images

Name Path	Method	Status Text	Type	Size Transfer
/home/images		OK		8.55KB
ipad_hero_2x.jpg /home/images	HEAD	200 OK	image/j...	0B 352.04KB
promo_video_march_2012_ke /home/images	HEAD	200 OK	image/...	0B 84.86KB
video_play_glossy_2x.png /v/home/j/images	HEAD	200 OK	image/...	0B 6.75KB
promo_video_ipad_launch_2x. /home/images	HEAD	200 OK	image/...	0B 133.23KB
video_play_glossy_2x.png /v/home/j/images	HEAD	200 OK	image/...	0B 6.75KB
promo_video_ipad_ad_2x.png /home/images	HEAD	200 OK	image/...	0B 169.69KB
ipad_title_2x.png images.apple.com/home/imagt	GET	200 OK	image/...	17.71KB 18.07KB
ipad_hero_2x.jpg images.apple.com/home/imagt	GET	200 OK	image/j...	351.74KB 352.12KB
video_play_glossy_2x.png images.apple.com/v/home/j/in	GET	200 OK	image/...	6.45KB 6.83KB
promo_video_ipad_ad_2x.png images.apple.com/home/imagt	GET	200 OK	image/...	169.39KB 169.76KB
promo_video_ipad_launch_2x. images.apple.com/home/imagt	GET	200 OK	image/...	132.93KB 133.29KB
video_play_glossy_2x.png /v/home/j/images	HEAD	200 OK	image/...	0B 6.75KB
promo_appletv_2x.png /home/images	HEAD	200 OK	image/...	0B 58.76KB
promo_appletv_2x.png images.apple.com/home/imagt	GET	200 OK	image/...	58.46KB 58.84KB
ipad_subtitle_2x.png images.apple.com/home/imagt	GET	200 OK	image/...	8.19KB 8.56KB
promo_video_march_2012_ke images.apple.com/home/imagt	GET	200 OK	image/...	84.56KB 84.92KB







63 requests | 2.12MB transferred | 21.25s (onload: 4.17s, DOMContentLoaded: ...)

Apple.com as an anti-pattern

The total size of the page goes from **502.90K** to **2.13MB** when the retina versions of images are downloaded.

Responsive Video

How do you provide the right video codec?

Browser/Device	Video Formats	Audio Formats	Multiple Sources
Chrome	MP4, WebM	AAC, MP3, Vorbis	
Firefox	WebM	Vorbis	
Internet Explorer	MP4	AAC, MP3	
Safari	MP4	AAC, MP3	
iOS	MP4	AAC, MP3	
Android	MP4	AAC, MP3	
Opera	WebM	Vorbis	
	View Details	View Details	View Details

<http://www.longtailvideo.com/html5/>

How do you maintain the aspect ratio?

- This is mostly a problem if you're embedding video from a third party site. If you are using your own video, it is not usually an issue.
- For third party video, FitVid.js is a good place to start.
- For your own video, the only trick is making sure you're not changing the proportions of the video element as the page resizes.

FITVIDS.JS

- LIKE
- LATER
- SHARE



Select a media source below:

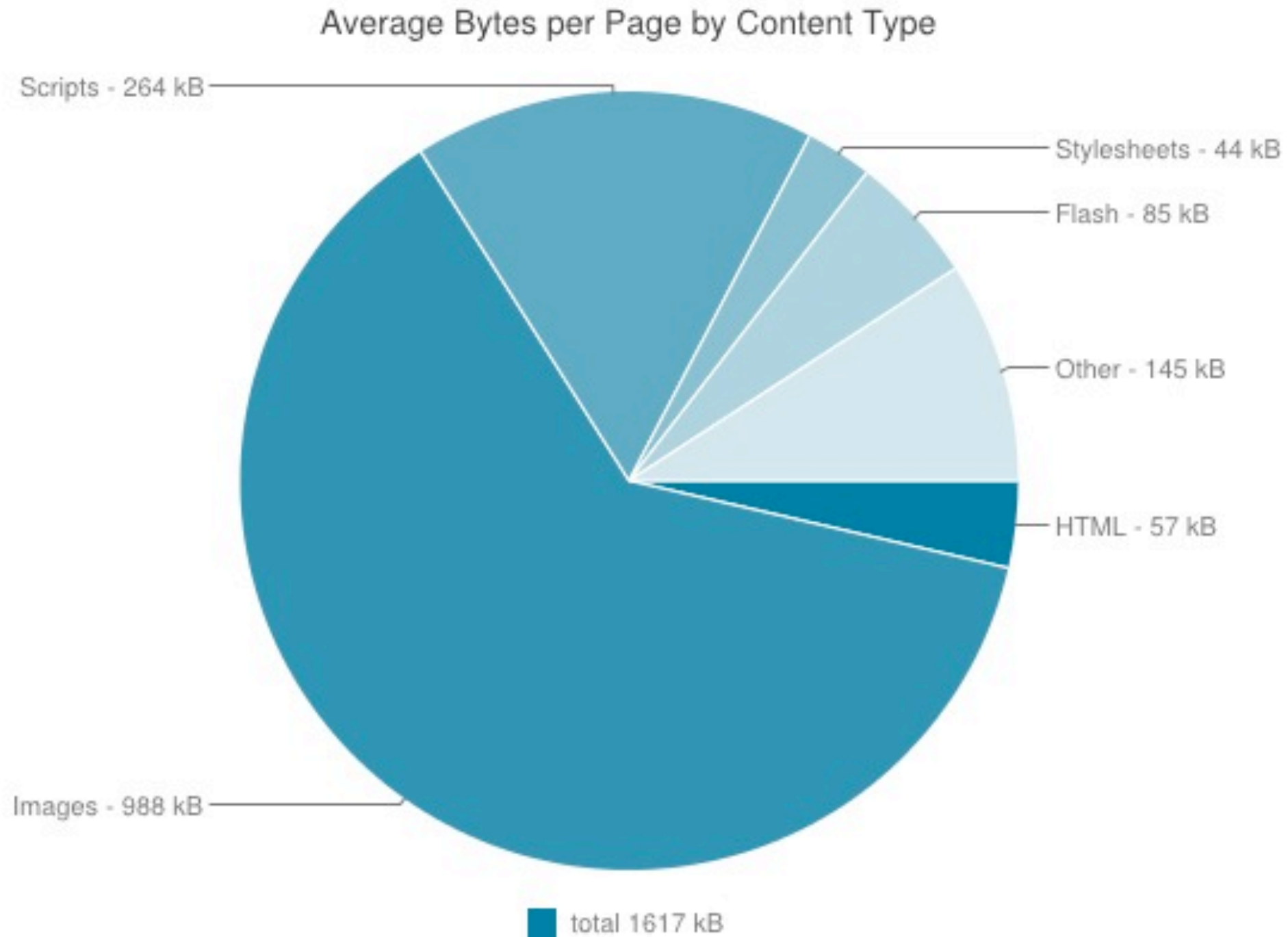
- [YouTube](#)
- [Vimeo](#)
- [Dailymotion](#)
- [Google Maps](#)
- [Instagram](#)
- [Vine](#)
- [Generic iFrame](#)
- [More](#)

YouTube URL:

[Download or fork on Github](#). Please Embed Responsively.

Why spend so much time on images?

Images are 61% of the average page



Source: httparchive.org

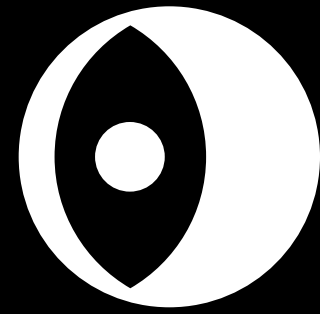
A photograph of a person sitting on the ground, leaning against the thick trunk of a large, leafless tree. The person is wearing a dark t-shirt and blue jeans, and is looking upwards towards the sky. The scene is set in a grassy field with some dry leaves and twigs scattered around. The lighting suggests it might be late afternoon or early morning, with a soft glow. The sky is a clear, pale blue.

**If I could dream up my ideal
solution for images...**

Eights guidelines and one immutable rule

#1 Use vector-based images or font icons whenever you can





IcoMoon

Custom Built and Crisp Icon Fonts, Done Right



IcoMoon App

- ✓ Browse 3800+ Free Vector Icons
- ✓ Import Your Own Vectors to Make Fonts
- ✓ Generate Custom & Crisp Icon Fonts
- ✓ Generate CSS Sprites with any size or color
- ✓ Basic Glyph Editing



Premium Icons

- ✓ 1200+ Vector Icons & Counting
- ✓ Handcrafted on a 16×16 grid
- ✓ Several Different Formats
- ✓ Optimized for Icon Fonts
- ✓ Free Updates

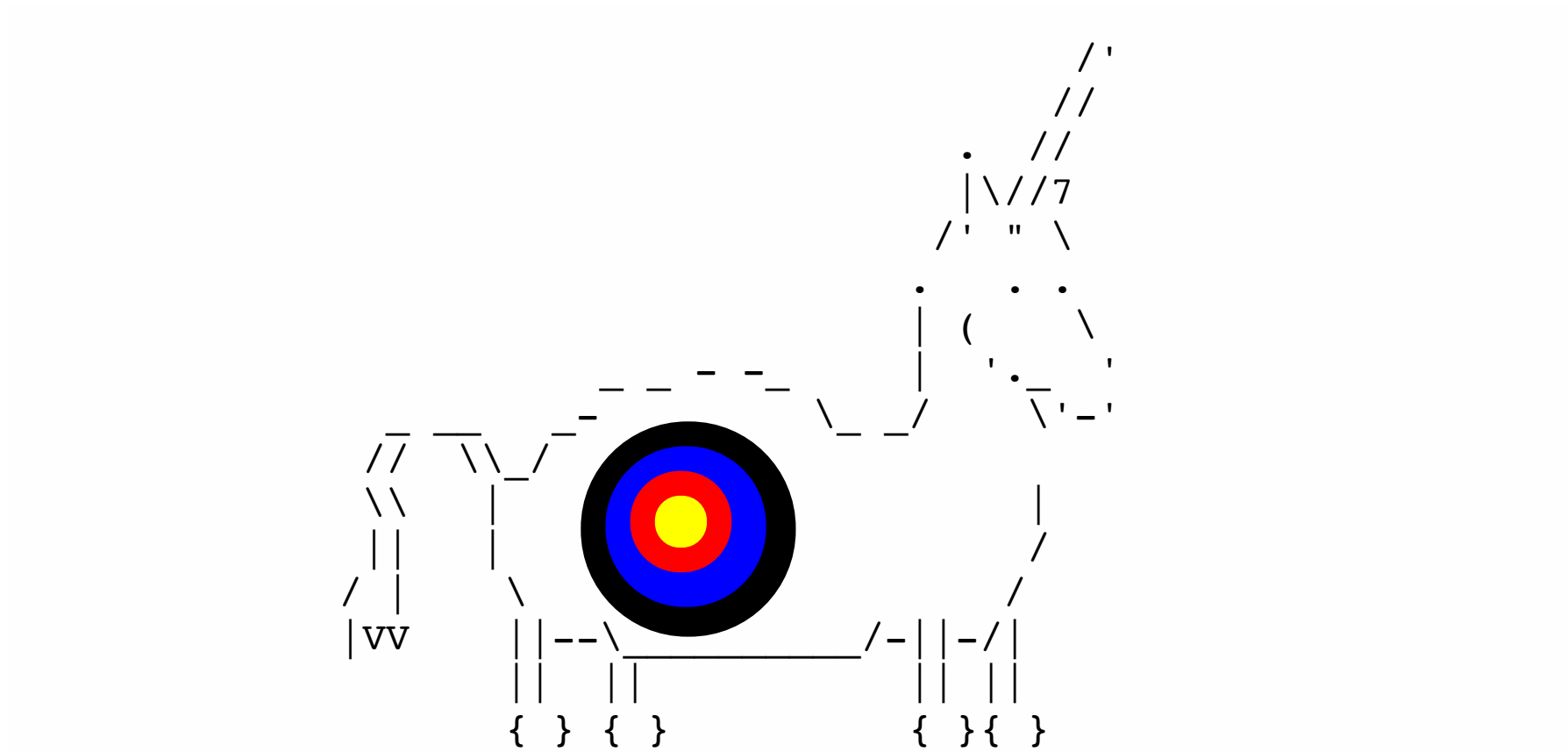


Font CDN

- ✓ Serve Custom-Built Fonts
- ✓ Powered by Amazon Web Services
- ✓ Easily Update Your Icon Fonts
- ✓ Production (Cached) Links
- ✓ Starting at \$1.60/Month

A Few Testimonials

Grumpicon.com based on Grunticon



Drag & Drop ur SVGs on the Grumpicon plz.



#2 Encourage people to upload the highest quality source possible



#3 Provide an automatic image resizing and compression service



#4 Images can be resized to any size with URL parameters

Example from Sencha IO SRC. Define height, width or both.

```

```

#5 Provide automated output of PictureFill or alternative

```
<div data-picture data-alt="A giant stone face at The Bayon temple in Angkor Thom, Cambodia">  
  <div data-src="small.jpg"></div>  
  <div data-src="medium.jpg" data-media="(min-width: 400px)"></div>  
  <div data-src="large.jpg" data-media="(min-width: 800px)"></div>  
  <div data-src="extralarge.jpg" data-media="(min-width: 1000px)"></div>  
  
  <!-- Fallback content for non-JS browsers. -->  
  <noscript>  
      
  </noscript>  
</div>
```


Responsive Images Markup Function

templates contain breakpoint information

```
{  
  "source": "/source.jpg",  
  "breakpoints": [  
    { "max-width": "30em", "pixel-density": 1, "width": 360px},  
    { "max-width": "30em", "pixel-density": 2, "width": 720px},  
    { "max-width": "30em", "pixel-density": 1, "width": 800px},  
    { "max-width": "30em", "pixel-density": 2, "width": 1600px},  
    { "pixel-density": 1, "width": 800px},  
    { "pixel-density": 2, "width": 1600px},  
  ]  
}
```

*Sample syntax. Don't
get hung up on
details.*

Responsive Images Markup Function

*Markup for all images
can be changed in one
spot.*

PictureFill Markup

#6

Provide a way to override resized images for art direction needs





Integrate image compression best practices

jpegtran or jpegoptim

OptiPNG or PNGOUT

far future expires headers

learn from mod_pagespeed or use it

#8 Bonus: Detect support for WebP image format and use it

The average WebP file size is 25% - 34% smaller compared to JPEG file size.

WebP compresses 34% better than libpng, and 26% better than pngout for loseless images.

**After going thru the whole
story... Let's revisit my original
question.**

Can a one size fits all solution...





**compete with
a tailored experience?**



Or will it always be TOO BIG?

Unlikely responsive design will ever be as fast as something crafted specifically for a device.





**But web
design is a
balancing
act.**

**And performance
is just one factor.**



**For most projects, responsive design
can be fast enough to make sense...**



**if we do the extra work
to make mobile first
responsive designs.**





**So... How to do the mobile
web magic?**



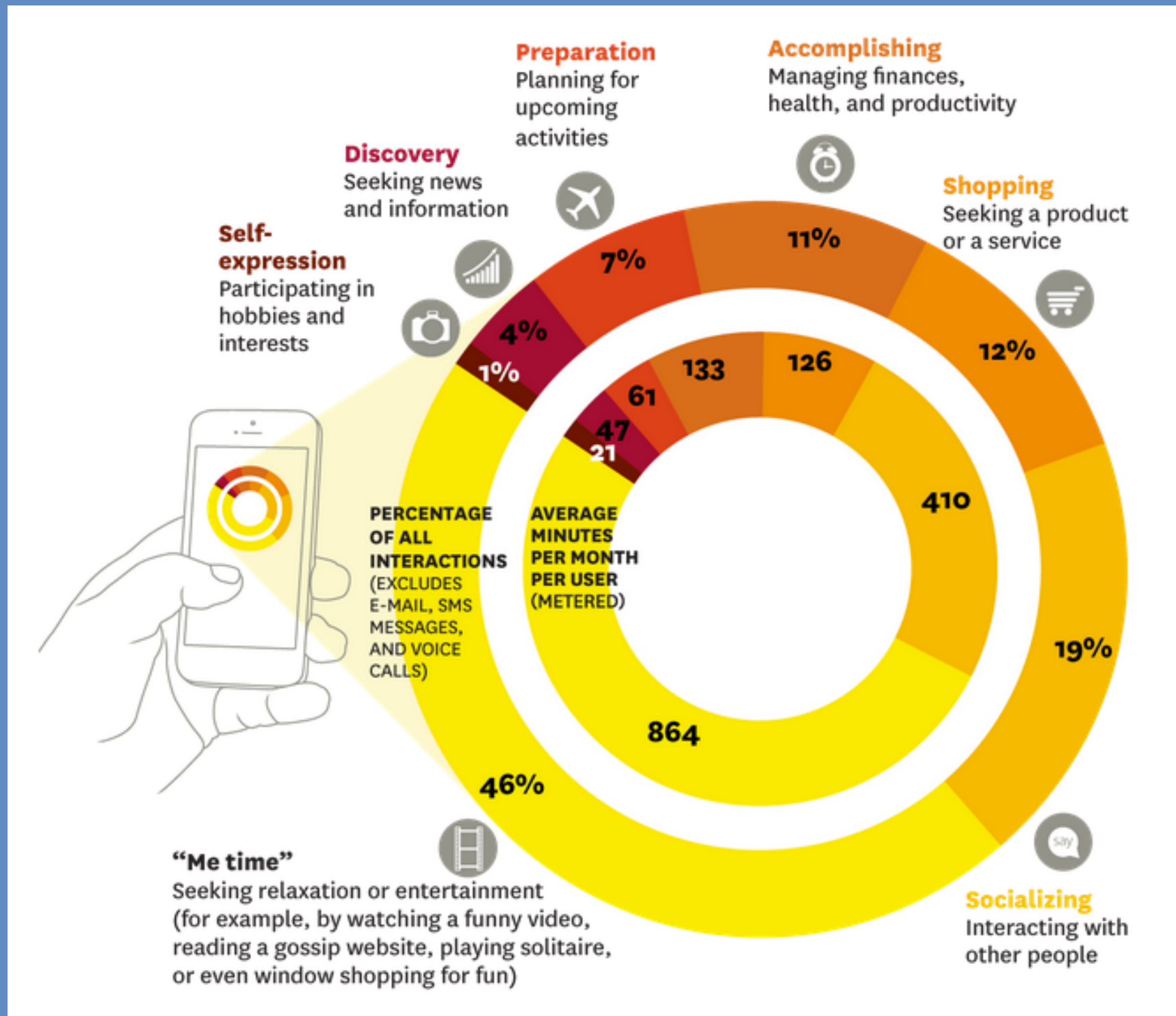
Think ahead - define your objective now and for the future.

Devices change, but objectives should stay consistent.

Know your target audience

- **Essential for defining the right mobile strategy**
- **Though many people have smartphones, don't assume that everyone does, or that they all have an iPhone or Android phone.**
- **Consider how your target audience use their phone and for what as well as if they have a reliable internet connection.**

Understand mobile website usage and behavior patterns



Understand mobile website usage and behavior patterns

Where are people using mobile devices?

- **84% at home!**
- **80% during miscellaneous downtime throughout the day**
- **76% waiting in lines of waiting for appointments**
- **69% while shopping**
- **64% at work**
- **62% while watching TV (alt. study claims 84%)**
- **47% during commute in to work**

Understanding tasks and context

- **Limitations with devices as well as how we experienced the internet on them meant that the tasks we carried out were quite limited. If someone accessed our site on a mobile device we could assume they were on the go and after something specific.**
- **Today mobile devices are used anywhere and everywhere and increasingly for the same tasks as a desktop. Though context is still an important consideration, it's in the form of how our surroundings impact our usage rather than that the context we're in equals a set number of tasks that we want to carry out.**

Try to avoid bespoke mobile site & Optimise for mobile

- > Responsive approach makes sense in at least
95 percent cases**

Keep core content the same



Use analytics to define what devices to focus on



<input type="checkbox"/>	Mobile Device Info		Visits
<input type="checkbox"/>	1. Apple iPhone		
<input type="checkbox"/>	2. Apple iPad		
<input type="checkbox"/>	3. (not set)		
<input type="checkbox"/>	4. HTC HTC Desire HD		
<input type="checkbox"/>	5. RIM BlackBerry 9780		
<input type="checkbox"/>	6. Apple iPod Touch		
<input type="checkbox"/>	7. HTC Desire Z		
<input type="checkbox"/>	8. Nokia Lumia 800		
<input type="checkbox"/>	9. HTC Desire		
<input type="checkbox"/>	10. HTC Wildfire		

Define your grid & breakpoints

- Defining your grid and breakpoints is the backbone of your mobile website design.
- There are a number of tools to help you define both the number of columns, their width and the gutters as well as providing guidance for how these will work on mobile websites and smaller screens.
- In some cases a fixed approach where the width remains the same is more appropriate.
- In some a fluid approach or a combination of the two.



<http://foundation.zurb.com/>

Think twice about the navigation

1. Top Nav Approach

The diagram illustrates the 'Top Nav Approach' for responsive design. It shows a desktop view on the left, a desktop view with a zoomed-in article on the right, and three mobile views at the bottom. An orange arrow points from the desktop view to the zoomed-in desktop view.

Desktop View (Left): Shows the site's navigation menu (home, archives, feed, twitter, contact) and the article title 'Media Query & Asset Downloading Tests'.

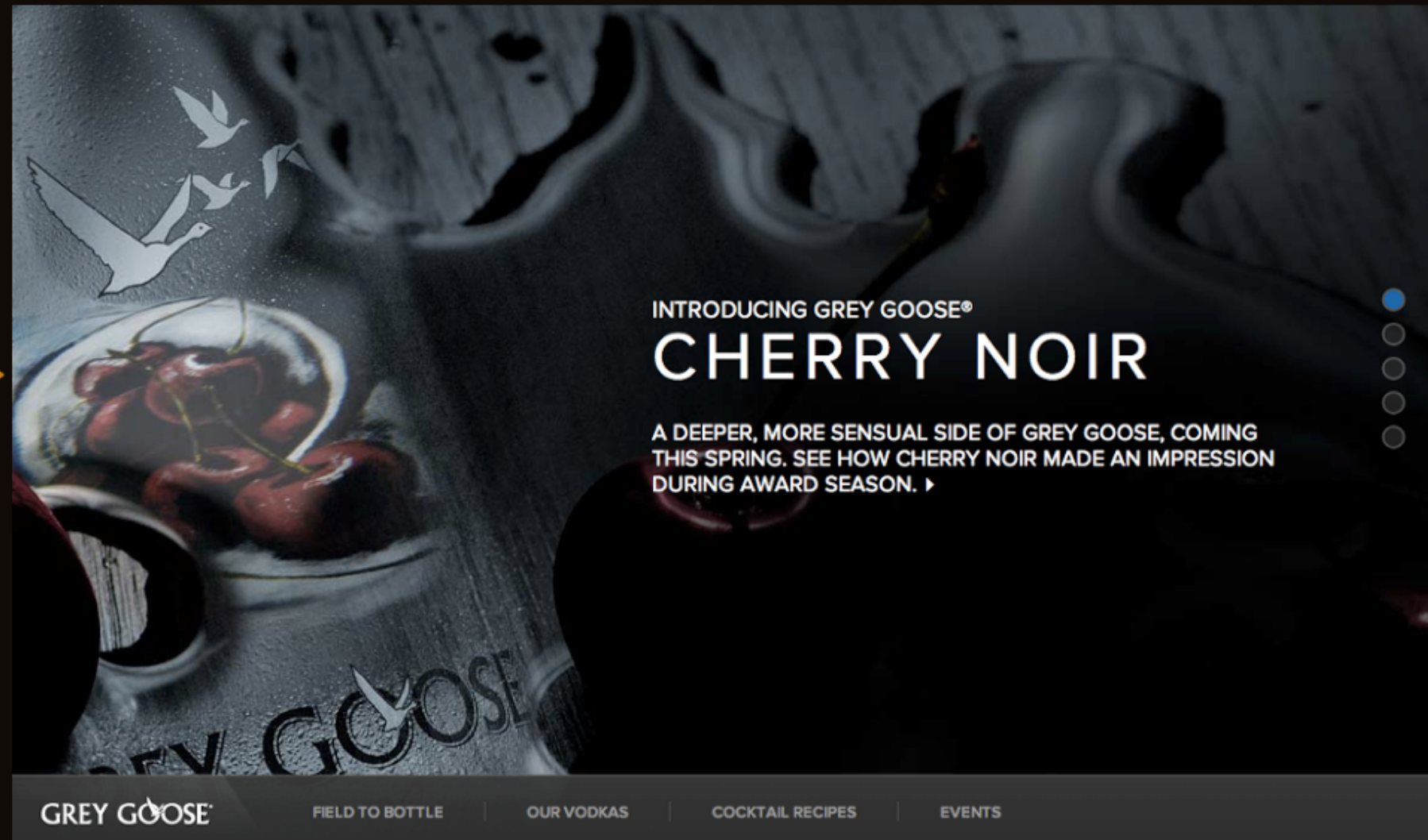
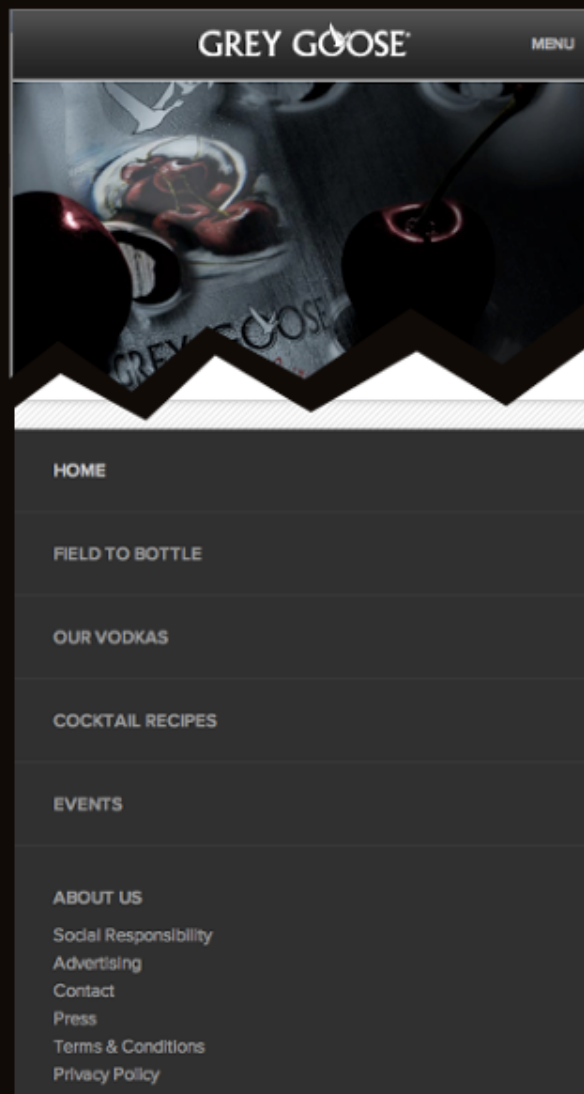
Desktop View (Right): Shows the article content, including the title 'Media Query & Asset Downloading Tests' and the beginning of the text: 'When you're building a responsive site, there will undoubtedly be times when you need to change a background image, or when you need to hide an image for a specific resolution range. Unfortunately if you're not careful, this can lead to multiple images being downloaded even when they aren't being used.'

Mobile Views (Bottom): Shows three mobile views of the site, each with a different navigation menu:

- Mobile View 1 (Home):** Shows the navigation menu with 'HOME' highlighted.
- Mobile View 2 (Program):** Shows the navigation menu with 'PROGRAM' highlighted.
- Mobile View 3 (Speakers):** Shows the navigation menu with 'SPEAKERS' highlighted.

Think twice about the navigation

2. The Footer Anchor



Think twice about the navigation

3. The Select Menu



Navigation

VS

RESPONSIVE DESIGN.

I believe that all content on the Web should be accessible to anyone using any kind of device to access the Internet. [Read more](#) →

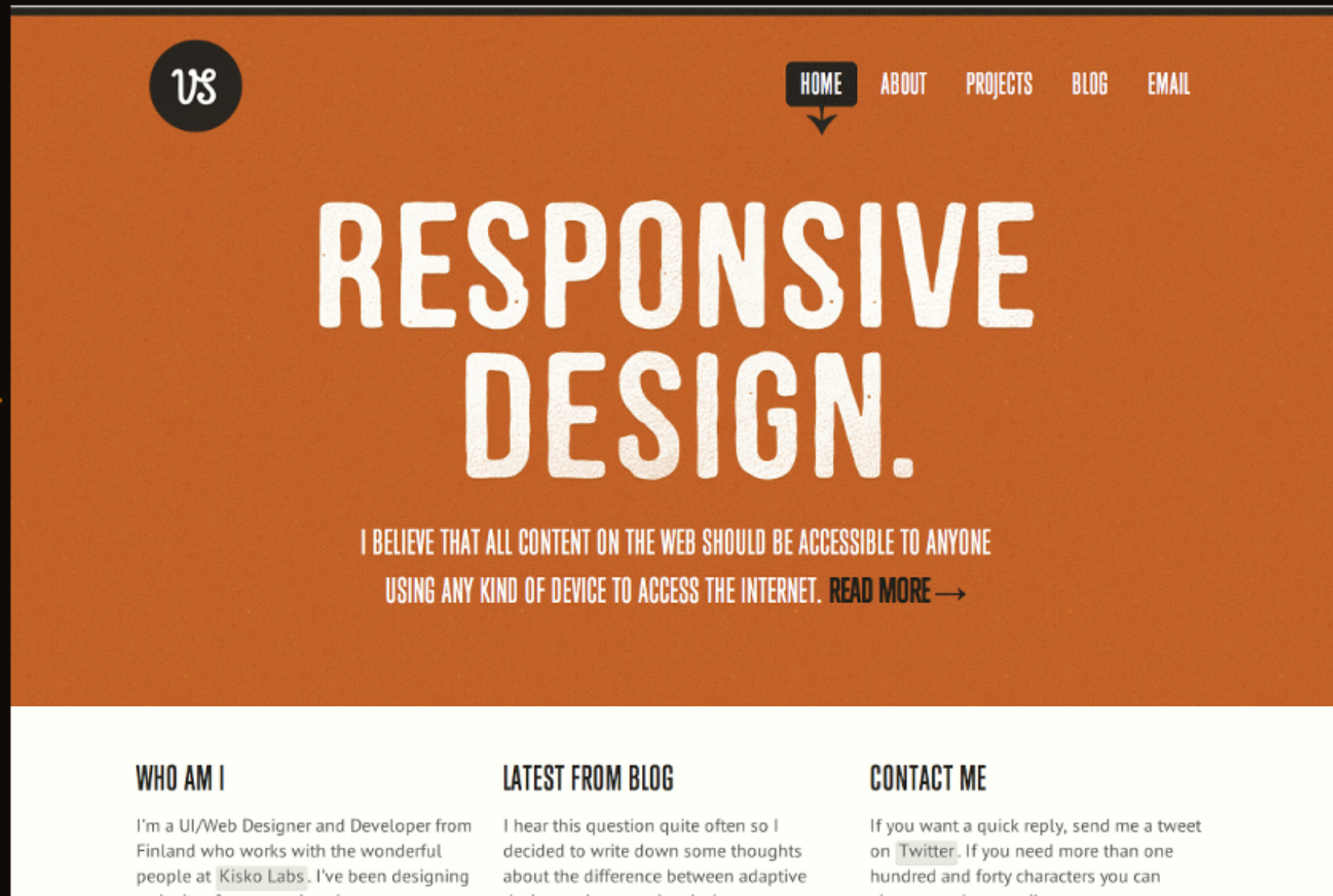
WHO AM I

I'm a UI/Web Designer and Developer from Finland who works with the wonderful people at [Kisko Labs](#). I've been designing web sites for over a decade.

[View about](#)

LATEST FROM BLOG

I hear this question quite often so I decided to write down some thoughts about the difference between



VS

[HOME](#) [ABOUT](#) [PROJECTS](#) [BLOG](#) [EMAIL](#)

RESPONSIVE DESIGN.

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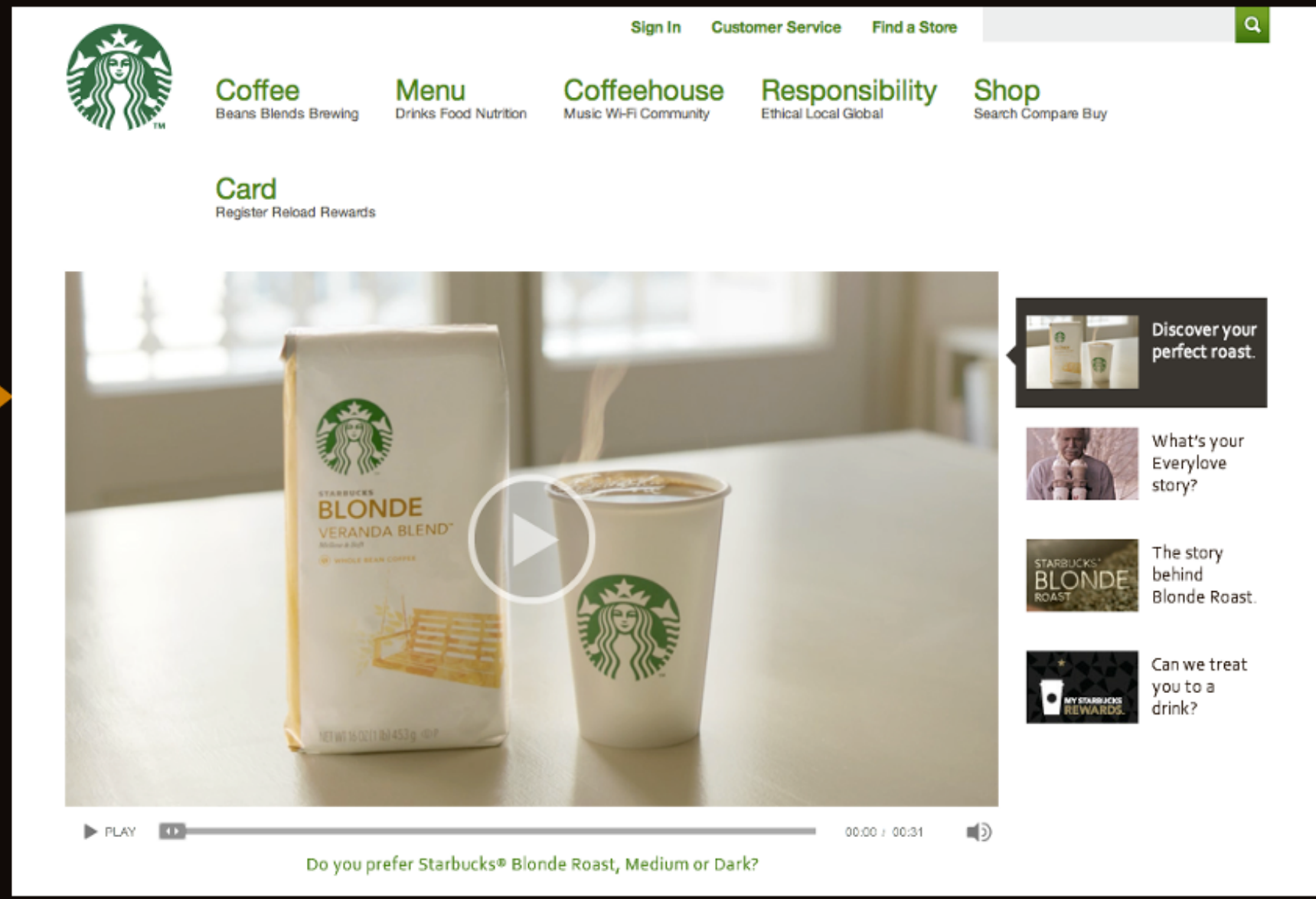
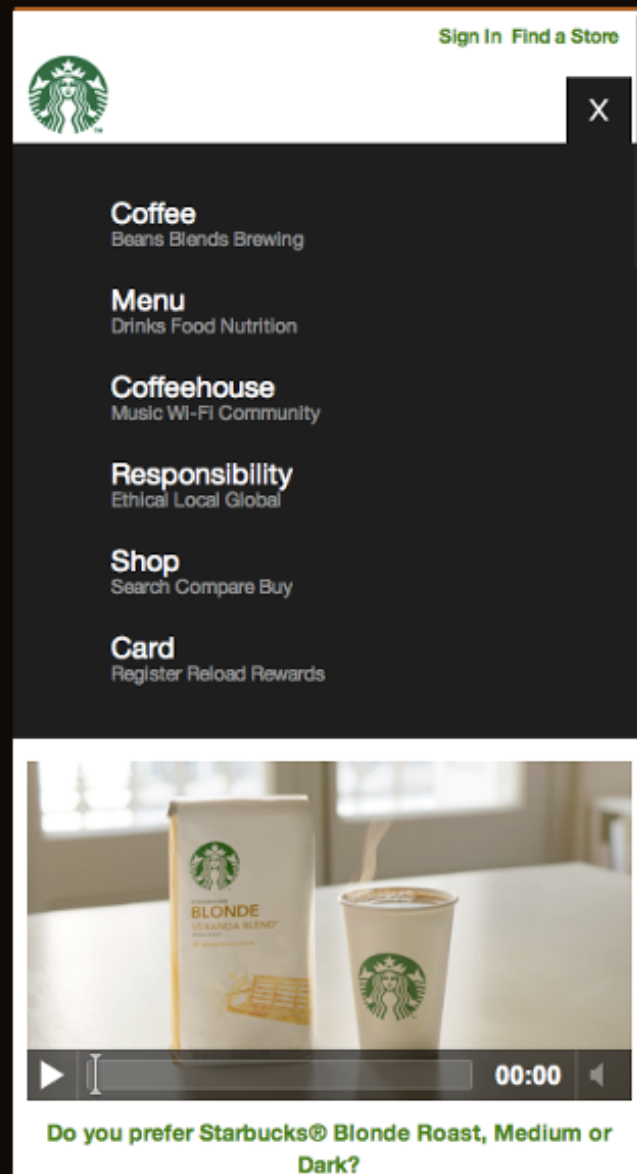
I hear this question quite often so I decided to write down some thoughts about the difference between adaptive design and responsive design.

CONTACT ME

If you want a quick reply, send me a tweet on [Twitter](#). If you need more than one hundred and forty characters you can [always send an email](#).

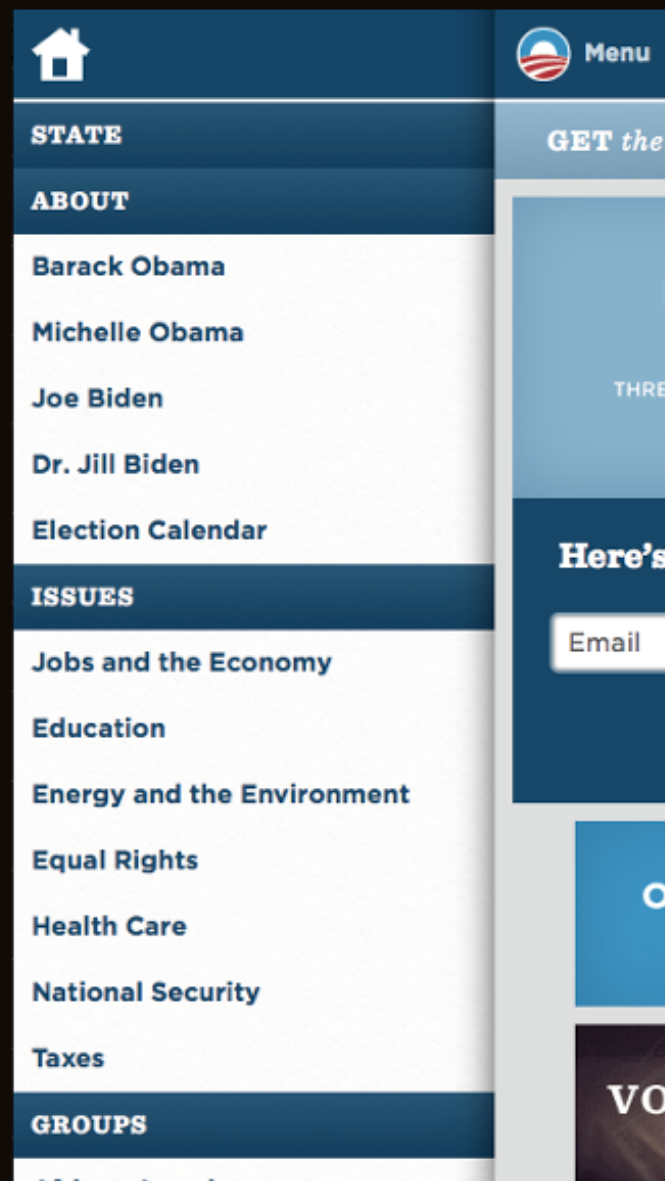
Think twice about the navigation

4. The Toggle



Think twice about the navigation

5. The Left Nav Flyout



Think twice about the navigation

6. The Footer Only

OUR CATALOG

Issue 1: Busted!
True Stories of Getting Caught In the Act
BUY: \$12

Issue 2: Geek
True Stories of People Taking Things Too Seriously
BUY: \$12

Special Issue: Wild Life
Stories of the Animals We Love
BUY: \$6

Issue 3: Sex & Death
True Stories of Beginnings and Endings
BUY: \$12

Join the Fray List to receive special love notes: **SIGN UP**



Fray is the web's original storytelling magazine, telling true stories online and off since 1996.

FRAY BEGAN as a website. We presented individually designed, true first-person stories. Each one ended with a question that prompted the audience to tell their stories, too. **You can see an archive here.**

THEN IT EVOLVED into a series of live storytelling events, Fray Days and Fray Cafés, that took place all over the world, attended by thousands of people. **See photos and listen to audio** of the events.

AND NOW Fray has evolved again — this time into a series of independently produced books. Each issue is focused on a central storytelling theme, including personal stories, articles, and original art.

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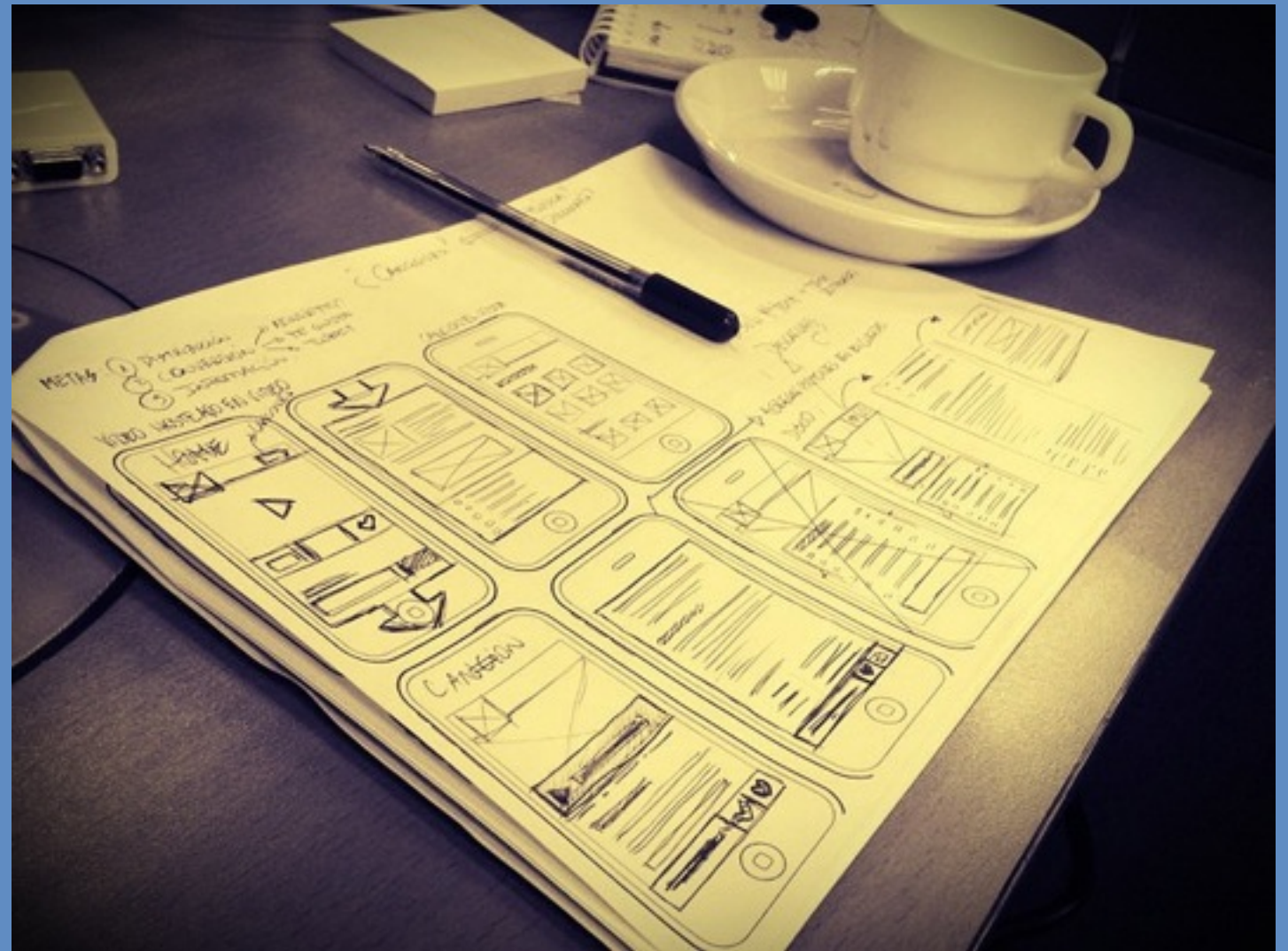
Expertly hosted by Media Temple

Think twice about the navigation

- **Try to keep to a maximum of three levels of navigation through a mobile site. (I usually aim for just two.)**
- **Mobile users want to get information quickly, so they won't tap here, there and everywhere just to find what they're looking for.**

Not every page/screen needs a wireframe/design

- Use analytics as a guide for what to focus on
- A lot of that can be handled with a master set and sketches for the rest.



Prototype, test, and iterate



Deliver content quickly

- Try to understand what people visiting a mobile phone website will actually expect to see - ask clients what's really important to them and consider what information their users will want to access quickly, such as reservation information, menus and location maps on a restaurant website.**

... What what's more there to follow or consider?

- Choose the right web font (no sans serif please!), legibility is a must**
- Test at all stages (mockups, prototypes,... and colors as well!)**
- Minimise text input; Offer shortcuts to prefill portions of text**

Thanks for staying awake!

Special thanks to Jason Grigsby for borrowing me a bunch of slides and all the Flickr users sharing under creative commons.