Responsive Heroes at Scale

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Hello!

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Walmart starts moving to Responsive Web Design in 2014
What’s a hero image?
Hero images are usually large promo images.
How did we get started?

photo credit: www.flickr.com/photos/ian_munroe/3598706185/
<table>
<thead>
<tr>
<th><strong>Bold 36pt</strong></th>
<th><strong>Semi-bold 36pt</strong></th>
<th><strong>Italics 36pt</strong></th>
<th><strong>Regular 36pt</strong></th>
</tr>
</thead>
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<td><strong>Italics 11pt</strong></td>
<td><strong>Regular 11pt</strong></td>
</tr>
</tbody>
</table>
Large Device Width

Medium Device Width

Small Device Width

@1x - Normal pixel density images

@2x - Retina pixel density images
Cross-functional team is onboard.
A few weeks later...
Greet them with something sweet
Make Halloween a spooktacular success.

Shop Candy
Spread the savings
Refer a friend and you'll both get $15 toward a future order.
Refer Now

3:1

2.4:1

2:1
Spread the savings
Refer a friend and you'll both get $15 toward a future order.
Refer Now
6 Images to support retina displays
24 total images in a carousel with 4 unique images
And if you have to 20 different markets.
480 total images are needed
Design workflow

Creation → Upload
Actual Workflow

- Creation
- Asset Management
- Trafficking
- Publishing
How can we minimize team effort and reduce number of high quality images needed, without sacrificing site performance on any device?
Idea 1

Use only retina images.
Large Device Width

Medium Device Width

Small Device Width

@1x - Normal pixel density images

@2x - Retina pixel density images
WTfudge performance?
Introducing Walmart Grocery Pickup

Order groceries online. We’ll load them right into your car.

Get Started

Dimensions: 1080 × 460 pixels
JPEG quality: 80%
File size: 155 kb

Dimensions: 2160 × 920 pixels
JPEG quality: 80%
File size: 367 kb
Introducing Walmart Grocery Pickup
Order groceries online.
We'll load them right into your car.

Get Started

Dimensions: 1080 × 460 pixels
JPEG quality: 80%
File size: 155 kb

Dimensions: 2160 × 920 pixels
JPEG quality: 10%
File size: 156 kb
@1× resolution images

Dimensions: 1080 × 460 pixels

@2× resolution images

Dimensions: 1080 × 460 pixels
Introducing Walmart Grocery Pickup

Order groceries online. We’ll load them right into your car.

Get Started
Perceived quality
Idea 2
Reduce the number of breakpoints.
Large Device Width

Medium Device Width

Small Device Width

@2x - Retina pixel density images

JPEG quality: 10%
File size: 156kb

JPEG quality: 80%
File size: 219 kb

JPEG quality: 10%
File size: 155 kb
Idea 3
Standardize aspect ratios.
Spread the savings
Refer a friend and you'll both get $15 toward a future order.
Refer Now
Art Direction - One layout scaled down for smallest image breakpoint
Art Direction - Different layout for smallest image breakpoint (optional)

Introducing Walmart Grocery Pickup
Order groceries online. We’ll load them right into your car.
Get Started

Introducing Walmart Grocery Pickup
Learn More
Before

@1x - Normal pixel density

@2x - Retina pixel density

After

@2x - Retina pixel density

Spread the savings
Refer a friend and you'll both get $15 toward a future order.

Introducing Walmart Grocery Pickup
Order groceries online. We'll load them right into your car. Get Started

Learn More
Before

480 images
20 markets

After

160 images
20 markets
This time for real!
Adaptive Desktop

Separate mWeb
We’re going responsive in 4 months.
Jump right in.
What is currently being done?
Active styles that perform

Shop Men's Activewear

Fall for stylish savings

Shop Now
Active styles that perform
Shop Men's Activewear

Fall for stylish savings
Shop Now

Performance activewear
Lightweight tech fabric
Shop All Activewear

Fall for stylish savings
Shop Now
more than 6000 stories
How can we manage the smallest amount of files, minimize the workload for all the people involved, while on a short timeline?
My idea

Just use one image.
<table>
<thead>
<tr>
<th>Desktop and tablet layouts:</th>
<th>Mobile layouts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout A</td>
<td>Layout A</td>
</tr>
<tr>
<td>Layout B</td>
<td>Layout B</td>
</tr>
<tr>
<td>Layout C</td>
<td>Layout C</td>
</tr>
<tr>
<td>Layout D</td>
<td>Layout D</td>
</tr>
</tbody>
</table>
Seeing is believing.
Home Page (Breakpoint A)

420 x 250

860 x 250
Seeing is believing.
Heroes!

Active styles that perform

Shop Men's Activewear

Active Jackets from 1798

Sneakers

Big & Tall
Active styles that perform

Shop Now
Shop Now
Shop Now
Active styles that perform
Active styles that perform

Shop Now
Before

5,500 images
2.25 breakpoints

1:1 Desktop & mWeb

10,000 images
3 breakpoints
Everywhere

Responsive

4,200 images

5 breakpoints
What we learned
It’s not only about the technology
The teams impacted by responsive design aren’t always obvious
It’s a partnership between UX and Creative
Validate ideas through prototyping
Scale is actually not about size
Thanks!

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