Responsive Web Design

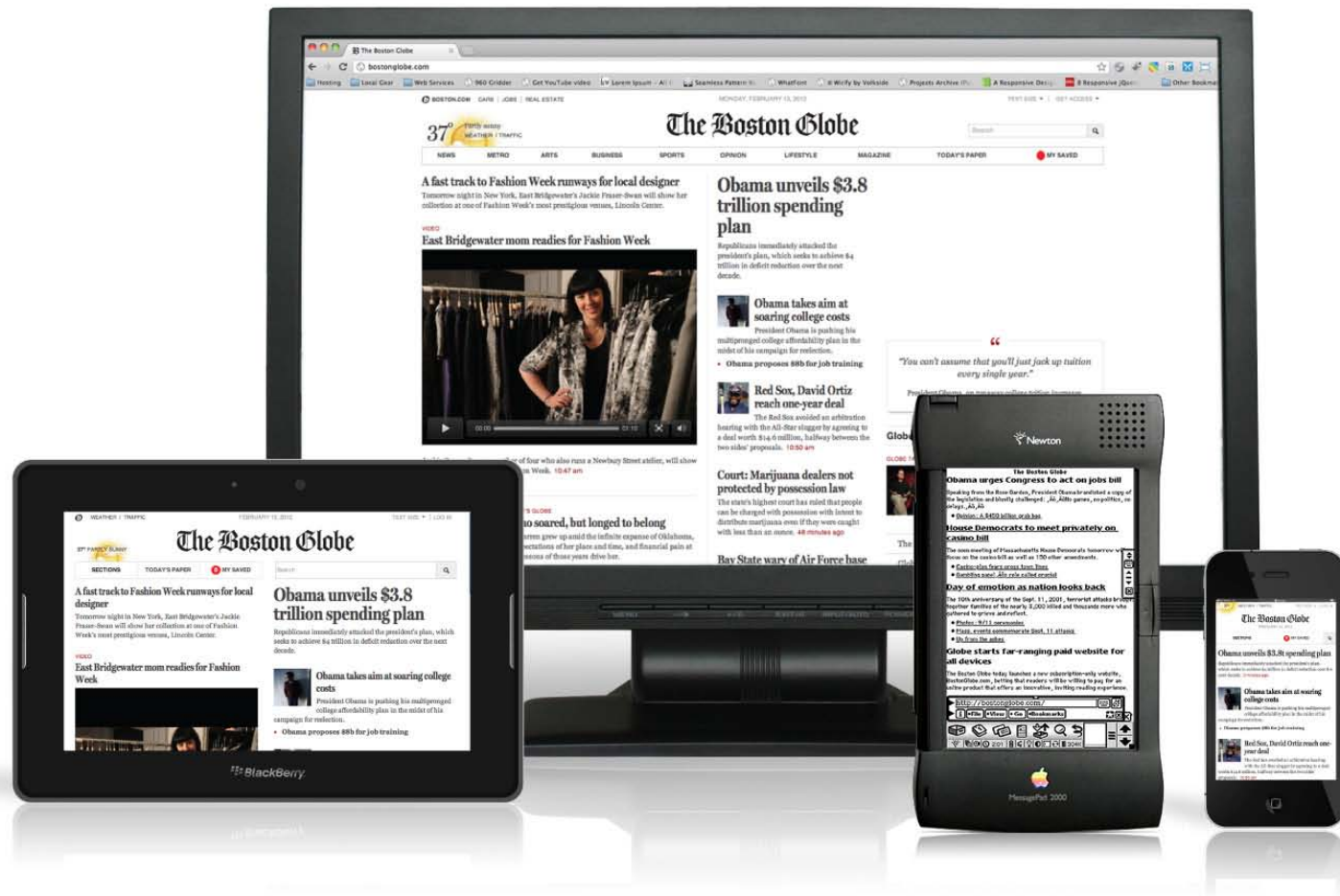## An Introduction

12/12/12

1. **The What**
2. **The Why**
3. **The How**

What is RWD?

RWD is a web design approach that hopes to provide an optimal viewing experience across a wide range of screen resolutions and devices.

Change the layout based on the viewing environment.

bostonglobe.com

microsoft.com

disney.com

Use feature detection to determine capabilities:

- medium (print, tv, handheld, etc.)
- device size
- viewport size
- orientation
- pixel density
- etc.

To make the site:

- easier to read, easier to navigate
- with minimal zooming, minimal panning
- device-agnostic
- work anywhere

Why RWD?

"**Day by day, the number of devices, platforms, and browsers that need to work with your site grows.**

- Jeffrey Veen

THIS IS THE WEB.

bradfrostweb.com

THIS WILL BE THE WEB.

bradfrostweb.com

The web is not limited to one size

- Multiple devices
- Multiple screen sizes
- Multiple resolutions

Web traffic from "non-traditional" sources higher than ever

…and growing

Mobile Data!

- 70% of Pandora's traffic
  (during March 2012)

- 54% of The Weather Channel's page views
  (in October 2011)

- 45% of all searches on Yelp
  (as of September 2012)

- Over 20% of all global YouTube views in 2012
  (triple the traffic from 2011)

How RWD works?

Use the same:

- codebase
- URL
- content

The 3 main components:

1. fluid grid
2. flexible media
3. media queries

1

Fluid Grid

Using relative units (%) instead of fixed width units (px)

Demo

2

Flexible Media

(images, video, canvas, svg, etc)

Demo

3

Media Queries

Inspect the characteristics of the viewport before applying styles.

Demo

Viewport meta tag

```
<meta name="viewport" content="width=device-width, initial-scale=1" />
```

Force the browser to use the real size of the physical screen.

Demo

With RWD we can:

- Change the layout based on the viewing environment
- Change the behavior based on the viewing environment

JavaScript & RWD

Test media queries in JavaScript using `matchMedia`

Demo

Learn more

- The **original article on A List Apart**
- The book: **Responsive Web Design**
- **W3C Media Queries Spec**
- **Multi-Device Web Design: An Evolution**
  by Luke Wroblewski

- **mediaqueri.es**
  A collection of inspirational websites using media queries and responsive web design.

- **This is Responsive**
  Patterns, resources and news for creating responsive web experiences

- **The Responsinator**
  A quick (non-quite-accurate) indication of how a site will look on the most popular devices

Questions?

Credits:

1. Presentation created using: **reveal.js**
2. **Boston Globe image**
3. **"This is the Web" images**
4. Benjamin Keen's **Responsive Design Bookmarklet**
5. **Pandora Nets 150 Million Registered Users**
6. **Weather Channel shines with mobile**
7. **Yelp Factsheet**
8. **YouTube Statistics**