UNDERSTANDING RESPONSIVE DESIGN
A SOLUTION FOR PUBLISHERS AND ADVERTISERS IN A MULTI-SCREEN WORLD
INTRODUCTION

As the penetration and use of mobile devices continues to increase, publishers and advertisers are realizing that they need to provide a seamless user experience across all screen sizes and devices. Because many websites and ads are built with Flash – a technology that isn’t supported on mobile devices – companies have largely addressed this challenge by building separate assets for mobile environments, an approach that increases the complexity of an already-complex situation. Here we examine how responsive design, a relatively new approach to Web design, can help solve the multi-screen challenge for both publishers and advertisers.

STATE OF THE INDUSTRY: A MULTI-SCREEN WORLD

The Web now exists in a multi-screen world. Mobile device adoption has reached critical mass:

AS OF 2013, THERE ARE:

- 140 MM SMARTPHONE OWNERS
- 123.1 MM TABLET USERS

IN THE U.S.—FIGURES THAT ARE CONTINUING TO RAPIDLY GROW.

MORE THAN 1 IN 3 MINUTES SPENT ONLINE OCCUR ON A DEVICE OTHER THAN A DESKTOP.

60% OF INTERNET USERS ACCESS THE WEB FROM MORE THAN ONE DEVICE.

Sources: eMarketer, May 2013; comScore, Feb 2013; Experian, March 2013
Many consumers now own multiple Internet-enabled devices and tend to shift their browsing and search activity across those devices over the course of the day. They check their smartphones first thing in the morning, use desktops at work, then turn to their tablets as they relax at home in the evening.

As mobile device adoption increases, time spent on those devices naturally increases as well. The multi-screen world is the new digital reality.

**NUMBER OF DEVICES USED TO VISIT WEBSITES BY U.S. INTERNET USERS, JUNE 2012**

60% of U.S. Internet users use two or more devices

17% use four or more devices

Note: In the past 7 days; Source: Experian Marketing Services, “2013 Digital Marketer Report,” March 18, 2013

**U.S. SMARTPHONE AND TABLET USERS, 2011-2017**

Note: Smartphone users are individuals of any age who own at least one smartphone and use the smartphone(s) at least once per month; tablet users are individuals of any age who use a tablet at least once per month | Source: eMarketer, March 2013
PART I: THE MOBILE CHALLENGE

Delivering Web content that looks good and functions properly across multiple screen sizes and devices is a challenge. Traditionally, Adobe Flash has been widely used to add interactive multimedia content to websites—but many mobile devices do not support Flash. In fact, Steve Jobs took a stand against Flash in 2010, noting that it would never be allowed on Apple’s mobile devices as Flash is designed for desktops and mice, not touchscreens and fingers. Some publishers have kept their main websites in Flash and built separate mobile sites, but continued variation across mobile devices and screen sizes makes this option less and less appealing. In early 2013, mobile analytics firm Flurry reported that 80% of app sessions occur on just 3.6% of device models—but that’s still 72 different models, and new ones are constantly being introduced. It’s inefficient, time consuming, and costly to build and maintain multiple site versions for different devices and screen sizes. With so many different screen sizes to test, publishers need a simpler solution.

RESPONSIVE DESIGN AS A SOLUTION

Because of these difficulties, many publishers are now rethinking the technology behind their sites and turning away from Flash. Instead, they’re using a Web design approach called responsive design. Websites created with responsive design can dynamically change layouts, font sizes, links, and menus based on screen size, ensuring an optimal display of content on every device without the need to create and maintain separate sites. Responsive design uses HTML5, supplemented with CSS and JavaScript, as a development platform to deliver rich interactive experiences across devices similar to those that can be developed with Flash, while also facilitating touchscreen interactions where those capabilities exist.

As mobile usage increases, having a site that works seamlessly across devices has become critical, so it’s no surprise that publishers are increasingly embracing responsive design. Leading publishers such as Time, Google, Disney, and the Boston Globe, as well as leading brands such as Starbucks, Skype, Microsoft, and Sony have already embraced a responsive strategy. Of the top 200 websites in the US, Undertone determined that over 14% were already using responsive design by June 2013, a number that is expected to grow over the coming months as publishers seek to retain and increase visitors coming from any and every device.

RESPONSIVE ON THE RISE

In May 2013, Undertone conducted a survey to uncover agency, marketer, and publisher perceptions of responsive design. Awareness levels and action plans varied.

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<thead>
<tr>
<th>AWARENESS OF RESPONSIVE DESIGN</th>
<th>BUILDING FOR RESPONSIVE</th>
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<tr>
<td>Agencies &gt; 48%</td>
<td>48% of publishers surveyed plan to implement responsive design in the next 12 months</td>
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<tr>
<td>Marketers &gt; 74%</td>
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<tr>
<td>Publishers &gt; 73%</td>
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Source: Undertone Industry Pulse survey, May 2013
RESPONSIVE DESIGN AT A GLANCE

HOW IT WORKS:

1 CODE BASE

HTML

detect screen size & device type

DESKTOP

TABLET

SMARTPHONE

content & functionality dynamically reorganizes for optimal viewing experience

WHAT IT LOOKS LIKE:

WHAT TO CONSIDER WHEN DEVELOPING A RESPONSIVE WEBSITE:

Responsive websites require close consideration of key elements.

OVERALL STRATEGY:
Develop for mobile first, as it’s easier to expand design than shrink it.

BREAKPOINTS:
Consider how content will be adjusted and where ads will appear based on standard ranges in screen size.

FONTS:
Choose fonts that will render well across devices.

DEVICE CAPABILITIES:
Consider how functionality needs to change to provide native experiences on touchscreen devices versus desktops.
As an increasing number of publishers implement responsive websites, advertisers and brands also need to think about the multi-screen environment. The fact that a site is responsive does not mean that the ads on that site will automatically become responsive as well; ads are built and designed separately, then plugged in to publishers’ sites. Most publishers with responsive websites are currently approaching their ad slots using the Swap or Drop methods. With “Swap,” ad units are switched out based on the ad size best suited to each device. And with “Drop,” ads are simply dropped altogether (or hidden) as the screen gets too small to support them, meaning that publishers are forgoing ad impressions—and revenue—on their mobile properties. The only other commonly used solution is to standardize all screen sizes around a standard ad size, like the IAB’s 300x250 rectangle. But that leaves brands with a fairly uninspiring canvas to work with across all screens.

RESPONSIVE CREATIVE DESIGN

The solution is fairly clear: like websites, ad creative also needs to be developed using responsive design. Responsive creative design does for advertisers what responsive web design does for publishers: delivers a seamless user experience regardless of the size of the ad slot. Ads built using responsive creative design use a single creative execution that can dynamically adjust ad size, font size, images, icons, and even interactive capabilities (such as click/drag for desktop, tap/swipe for mobile) to best fit the ad slot and device on which the ad is served. JavaScript tags are deployed to dynamically switch out and fit creative content to the available screen, delivering a device-appropriate experience. Responsive ad creative does not require publisher websites to be responsive, although of course the overall user experience will be best if the site is responsive as well.
RESPONSIVE CREATIVE DESIGN

More Exposure, Better Brand Perception

The obvious benefit of responsive creative design is a great brand experience: ads that look good regardless of screen size and make optimal use of device capabilities. Because mobile users are accustomed to app environments in which content is sized appropriately, they are sensitive to poorly designed experiences on the mobile Web. The impact of an ad is diminished when a user has to zoom to view it appropriately—or completely negated, as many users will never bother to zoom in and so will ignore the ad completely. By optimizing the look and feel of ad creative for every screen size, brands increase exposure, awareness, and the potential for interaction. Poor design can result in negative brand perception. Responsive creative design ensures the brand looks good everywhere and provides the opportunity for device-native interaction and engagement.

High Impact, Across Screens

One of the most significant challenges of not having Flash capabilities on mobile devices is finding a way to replicate the interactivity, animation and general user engagement that many Flash-based sites exhibit. Recent additions to the HTML language and standard capability have significantly closed that gap. It’s now possible to author extremely rich and interactive experiences using the standard language of the Web.

Unified Tracking

Because responsive creative design results in a single creative execution, rather than different creatives for each device, the approach allows for unified reporting across devices. This provides a more reliable measure of ad effectiveness across screens than a patchwork process of measuring and reconciling performance reports for different creative experiences across separate Web and mobile ad servers.

Time and Cost Savings

Responsive creative design can also decrease overall operational costs when advertisers use a responsive ad unit as a template for future campaigns. Initial investment in a responsive ad strategy positions advertisers for the inevitable long-term shift toward multi-screen usage, and the use of a single creative execution for all devices results in significant time savings.

CONSIDERATIONS WHEN DEVELOPING A RESPONSIVE AD CAMPAIGN:

CREATIVE

POST-TAP EXPERIENCE:
Are your landing pages responsive or otherwise designed for optimal viewing experience across devices?

CREATIVE ASSETS:
What kind of campaign are you looking to run? Animation, video and interactivity all pose separate challenges in HTML

DEVICE SIZE:
Device orientation; will your ad appear above-the-fold/below-the-fold?

DEVICE CAPABILITIES:
Click and drag on desktop, touch and swipe on tablet and smartphone; keyboard layout differences on Android and iOS

OPERATIONAL

PLANNING:
Finding the best ad package/sizes based on available inventory

TAGS:
Different tags for desktop and mobile, breakpoint tags

TRACKING:
Discrepancy between advertiser and publisher counts for tracking across devices

REPORTING:
Determining inventory and pricing by screen, breaking out metrics by screen size
The multi-screen world is here to stay, and the Web is moving towards a responsive HTML5 standard. We believe that:

1. **Publishers Should Strongly Consider Adopting Responsive Design When Building Their Sites.** This will help them to best meet the needs of their users, who are increasingly accessing the Web from smartphones and tablets in addition to desktops.

2. **Responsive Creative Design Offers Many Benefits for Advertisers.** As the market continues to fragment, responsive creative design allows advertisers to centralize creative production, tracking, and optimization of their campaigns across all screens and devices. It also offers an optimal user experience regardless of screen size.

3. **A Great Creative Experience is Key to Reaching Users on Their Mobile Devices.** Responsive creative allows advertisers to take a mobile-first approach to design—without losing scale in the short term. Instead of having to choose between mobile and desktop, responsive creative design allows advertisers to design with mobile in mind, but reach users seamlessly on both.

4. **Responsive Design Isn’t a Trend; It’s a Future-Proof Solution That’s Here to Stay.** As the devices with which consumers access the Web continue to change, responsive design will allow both publishers and advertisers to deliver seamless user experiences that make optimal use of every device and screen size. Advertisers who make the move to responsive creative design now will find themselves ahead of the curve as the use of responsive designs grows over the coming months and into 2014.