

Building a Mobile-Optimized Website Best Practice

Ektron Mobile

CMS400.NET Version 8.02

Doc. Rev. 2.2 (Nov. 2010)

ektron
What do you **want**
your **website** to do?

Mobile Web Usage is Growing Exponentially

Optimize Your Website For Mobile



Building a Mobile-Optimized Website Best Practice

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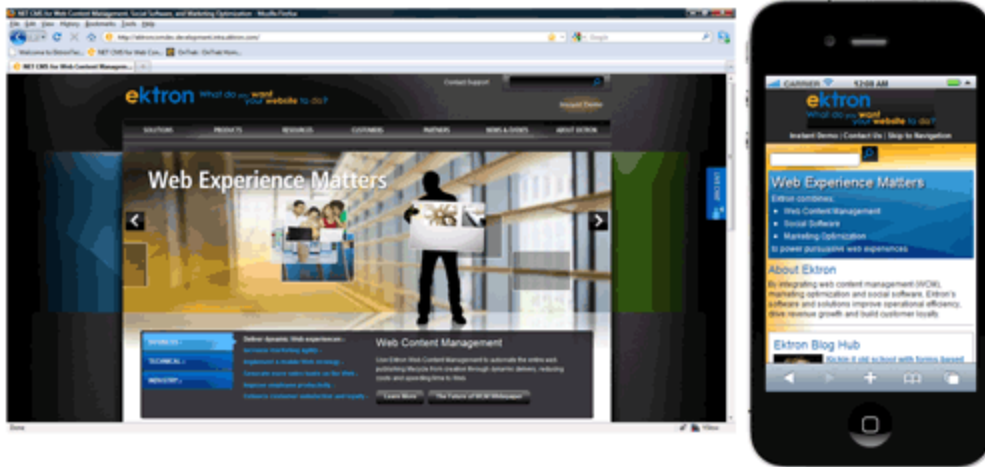
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Building a Mobile-Optimized Website with Ektron

The mobile web is here. According to *Gartner Inc.*, by 2013 mobile devices will be the most common device used to access the Web. Having your website accessible to mobile devices is a critical model for business today. A growing part of your audience is already finding your website through mobile search, the most popular activity on a mobile phone.

Your website may be optimized for the desktop experience and may need help translating to mobile use. Mobile applications require different, more compact navigational aids, and content must fit into a smaller footprint. Mobile websites need "click to call" options to take advantage of cellular technology, a robust search, flexible menus, and quick access to content. Tables and figures may need to be adjusted to avoid unnecessary "pinching" and scrolling. The following image demonstrates differences between the desktop and mobile browser experience.



How do you optimize your website for mobile devices? Ektron's web content management system lets you easily make your site mobile-optimized. Now you can manage content from one location (multichannel publish). Today, you can go mobile with Ektron.

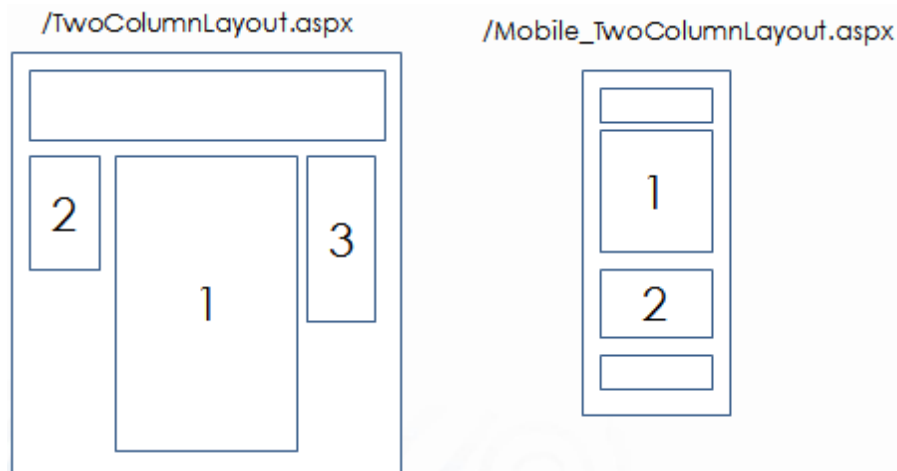
Separating Content from Presentation

Ektron CMS400.NET separates content from presentation so that your content authors can concentrate on composition. Templates determine the presentation of content, letting you deliver the same content in ways that achieve the best results for people visiting your site from a desktop, tablet, or mobile device.

Using Templates

A template is a customized web page format that is comprised of objects such as content blocks, list controls, menus, rotating banners, a search object, videos, and flash, just to name a few of the hundreds of objects. You can deliver the optimum user experience by assembling the objects to take the best advantage of device-specific, browser-specific, and channel-specific presentation formats.

The following illustrates PageBuilder templates for desktop and mobile devices. Notice that the mobile template does not include content 3.

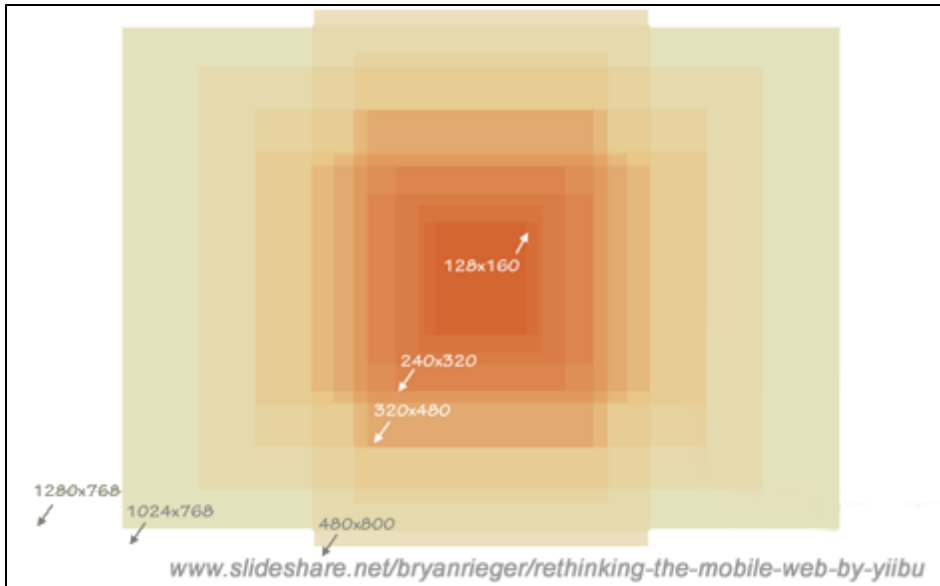


It is important for you to use the same drop zone names for both the mobile and desktop PageBuilder templates. This is so that the quicklinks used by the desktop template also refer to the proper drop zone in the mobile template. Content does not display when the mobile template contains a drop zone name that is different from the desktop.

Making choices for display sizes

A website can have 5 to 10 templates that include a page header, left navigation, body, right navigation and footer. A template designed for viewing

on a desktop can take advantage of real estate. For example, it can display information in 3 columns.



Because of the smaller display size, templates for mobile devices may have a single column to eliminate horizontal scrolling, pinching and zooming. Instead of creating different content, you decide what is practical for each device by creating different templates. Objects may need to be omitted (such as a rotating banner or objects that have larger download times), or replaced with mobile-equivalent objects.

Creating Elastic Content

Content on mobile devices has to be elastic, meaning that it can scale to the various sizes of display devices. Use percentages instead of hard-coded pixel sizes for the mobile template.



Set the pixel width of PageBuilder columns for the desktop layout, but use percentage width values for the mobile device layouts. When you set the PageBuilder drop zones width to 100%, the normal flow of the objects in the mobile browser will cause them to stack from top to bottom giving the best experience to the mobile visitor.

Using Smartforms

Smartforms let you easily write content for a mobile browser that is different from a desktop browser. In each type of browser you can determine the amount of content to show and what images or links you need. For example, the length of content for a desktop may be 250 words while the length for a mobile visitor may be 50 words.

Smartforms let you create the text and images that you need for mobile and desktop browsers in a single content item. You create XML data fields in Smartforms for each browser type. Content authors use these fields when they create new content.

Additionally, you may show a Flash video on a product page for desktop browsers and display a jpg image for mobile phones that do not display Flash. Use one Smartform field for the Flash file and another field for the location of the jpg file.

Determining the Device that Accesses Your Website

Ektron CMS400.NET detects the device that a person uses (such as a Smart Phone or tablet) to access your website. It also detects characteristics of a particular device, such as the differences between the Android Droid X and the

Android Droid 2. Knowing these characteristics lets you determine how to render the user experience. For example, one device may support Flash technology and another may not.

Grouping Devices

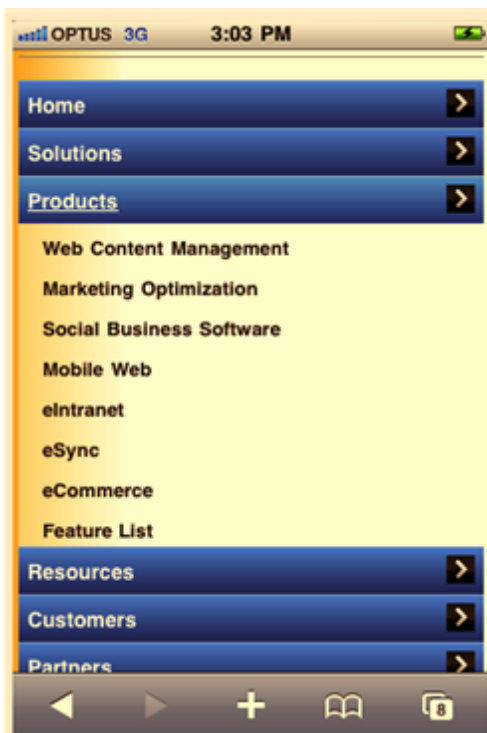
You can group devices for standard presentation and add refinements for specific devices. For example, a device configuration may include a *Smart Phones* group that includes Android, BlackBerry, iPhone, and so on; and a *Tablets* group to include the iPad, RIM, and so on.

Device detection determines what gets utilized per group (template, PageBuilder dropzone, targeted content widget).

Navigating on a Mobile Device

Because mobile devices have a lot less space than a desktop website, they need navigational aids at the top and bottom of the content. At the top, provide simple navigation, and at the bottom use AJAX-functionality to expand out or drill down to additional site information. Eliminate horizontal scrolling where possible.

The FlexMenu works on mobile mevices. Be sure to make adjustments for the hover-over event which Mobile phones do not use by using sub-menu layouts or other designs.



Leveraging Device Capabilities

Ektron helps you take advantage of the latest technologies. Technology like HTML5 provides:

- location-based information
- video
- click to call

Using Geomapping Features with a Mobile Phone

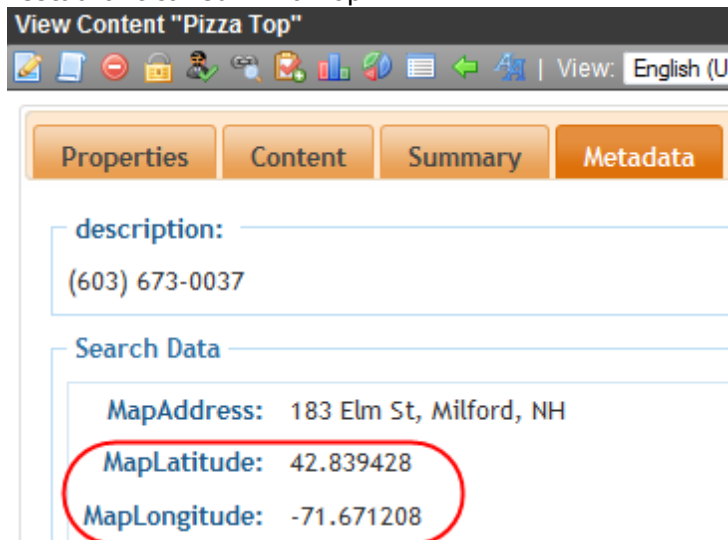
Mobile browsing makes the geographic location of a site visitor very important information. For example, if a mobile visitor is accessing your site, you can show nearby stores and special promotions.

Creating the mobile experience in Ektron Mobile takes 2 steps.

Step 1—Create Content with Geo Location Metadata

All content contained in Ektron Mobile can have MapLatitude and MapLongitude metadata. This metadata is automatically added when you publish the content with a street and city address in the MapAddress field.

The following image shows the MapLatitude and MapLongitude metadata for a restaurant called Pizza Top.



Step 2—Create a Mobile Template with the Map Server Control

Because of the size of a mobile device, you may decide to rearrange the content list, map image, and search components provided by the Map server control. Do this by changing the standard map EkML file. See the sample file `[siteroot]/workarea/template/map/map.ekml`.

To complete this step, do the following.

1. Place the Map Server control on a template used for mobile devices.
2. Add this template to the device configurations of the templates of the main web site. *Updating a Mobile Template* on page 17

Showing Maps and Near-by Locations

When you have finished the previous steps, you can browse to the template on your mobile device.

If your Smart Phone has GPS capability, it shows your location at the center of the map. For all other mobile devices, the center of the map is the Latitude and Longitude coordinates set on the Map Server Control.

Content locations appear as map pins and the content list is sorted by distance from the current location (with GPS) or map center.



Play Videos with the Brightcove Video Widget

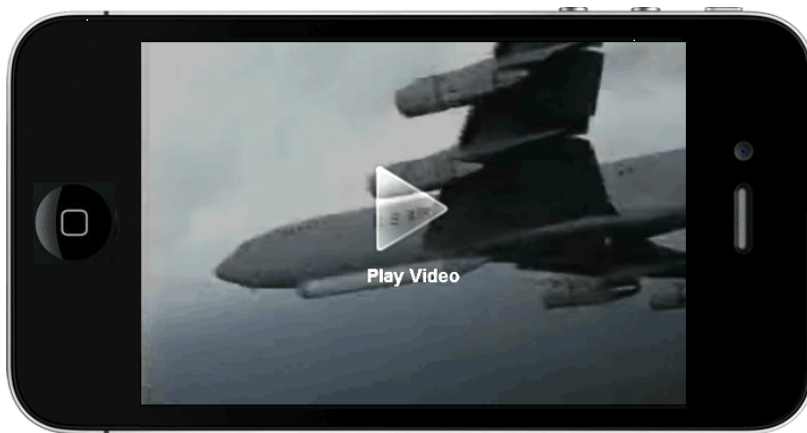
Your Brightcove.com account lets you upload, store, and play videos on your mobile-enabled web page with the Ektron Mobile Brightcove Video widget.

Videos can play on any type of mobile device because of Brightcove's ability to automatically provide multi-bitrate streaming and multiple renditions automatically.

To play videos with the Brightcove Video widget, follow these steps.

1. Set the Brightcove Video widget Configuration in the Ektron CMS400.Net Workarea.
2. Place the BrightcoveVideo widget on a PageBuilder page.
3. Upload videos using the Brightcove Video widget.
4. Choose the video to play in the Brightcove Video widget.

The following image is an example of the Brightcove Video widget on an Ektron Mobile web page.



Optimizing for Mobile Users

Think about how people will get to your site—through marketing campaigns, or search results—should you transition your entire Website to a mobile site or make it a mobile-tailored Website? A separate mobile site can present a disadvantage to people, if you have any links to a topic that land on a desktop page. Instead, Ektron's best practice is to "mobile-optimize" your entire site. If

your website is not "mobile-optimized," your conversion rate for those mobile viewers may be close to zero.

Optimizing on Analytics

Take advantage of multivariate testing to get your users to take the next step.

Analytics lets you know what your users are trying to accomplish on your website. By measuring their activity, you can respond and optimize your content display. Ektron's in-context analytics model gives you information about how mobile visitors are using your site and what content is most important to that audience.

- Group users that arrive at your site by phone, tablet, and desktop.
- Create subgroups of users that arrive at your site through an email campaign, or downloading a white paper.
- Track activity, trends, and popular areas of the website.

You can view data and generate reports on the originating domain, GeoIP, marketing campaign ID and more; gain a complete understanding of your mobile visitors, their demographics, attitude and so on.

"Mobilizing" Ektron.com

Use the following tips to help you build your mobile site.

- Understand the expected experience of mobile site visitors. Content needs to be accessible with few clicks.
- Simplify. Unless your existing site is already very targeted and small, consider only providing content that your visitor needs quickly.
- Target content based on the type of device and the visitor's geo-location to provide the proper experience the mobile visitor expects.
- Take advantage of every pixel of real estate on the smart phone's display with relevant and useful information.
- Consider utilizing a single column layout for mobile templates to avoid having the user scroll horizontally and/or require them to multi-touch or pinch to zoom in and out.
- Use a different, but similar, theme on your mobile version of the site compared to your standard website.
- Design your mobile template(s) to be elastic and not fixed width for aesthetics, but also to easily support the layout when the orientation of the device is changed.

- Use images only when necessary and always provide descriptive *alt* text for each image. Some mobile users turn off images for faster browsing.

Setting Up a Mobile Template

Use the following topics to set up mobile templates and device detection.

- *Enabling Device Detection in web.config* below
- *Adding a Device Configuration* below
- *Previewing Content in a Mobile Device Template* on the facing page
- *Reordering Device Configurations* on page 16
- *Updating a Mobile Template* on page 17

Enabling Device Detection in web.config

To Enable device detection in the workarea, follow these steps.

1. In your website root folder, edit `web.config`.
Always backup your `web.config` file before making changes.
2. Locate the key **ek_EnableDeviceDetection**.
3. Set the value to **True**.
`<add key="ek_EnableDeviceDetection" value="true" />`
4. Save the `web.config` file.

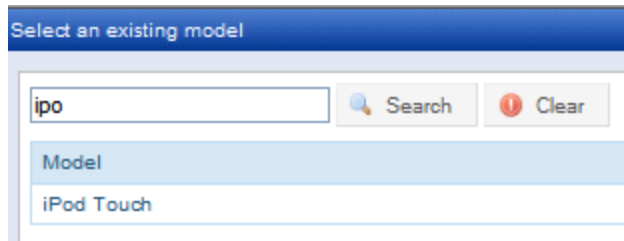
Adding a Device Configuration

Device configurations associate your templates to a variety of mobile devices by grouping together their characteristics, such as display size. When using mobile device configurations, Ektron Mobile automatically associates the mobile template in place of the full size template. You do not need to change Quicklinks or menus to see the mobile template and the mobile template name does not show on the address bar.

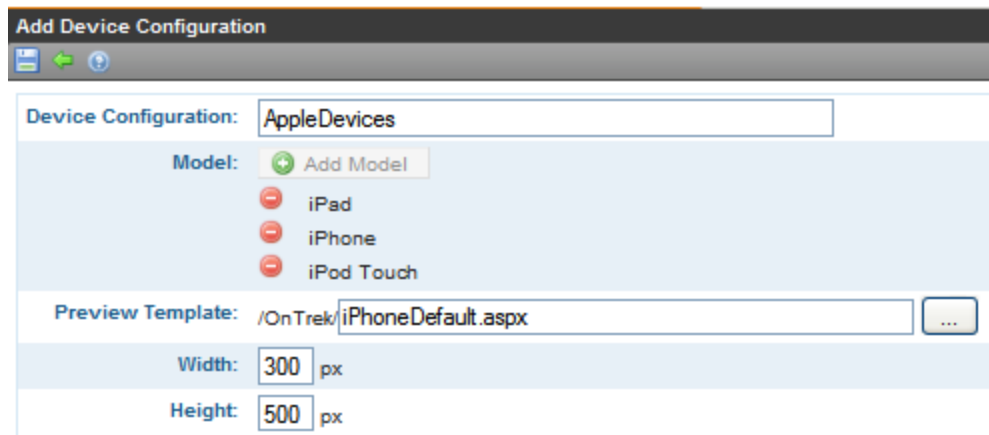
To add a device configuration, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Device Configuration**.
2. Click **Add Device Configuration** (+).
3. Enter a name for this configuration in the *Device Configuration* field.
4. Click (+) **Add Model**.

5. Select any of the existing device models for this configuration.



6. Add a template for previews into the *Preview Template* field. Use the ellipse button (...) to browse the list of existing templates.
7. Set the *Width* and *Height* that describes the size of the mobile device display in pixels.

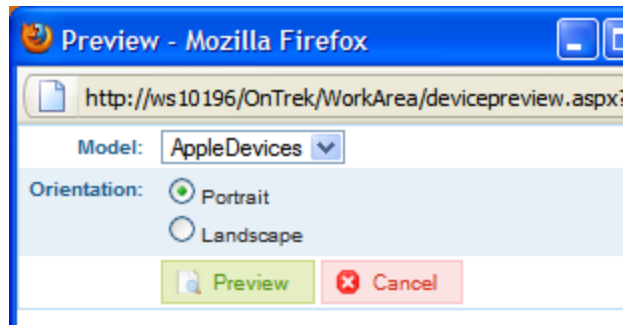


8. Click **Save Device Configuration** (📁) when finished.

Previewing Content in a Mobile Device Template

To see a preview of content in a mobile template, follow these steps.

1. Edit any content in the eWebEdit400 editor.
2. Click **Preview** (🔍).
3. You see this screen when device detection is enabled. (For more information, see *Enabling Device Detection in web.config* on previous page.)



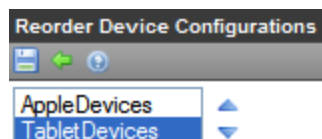
4. Select the *Model* and click **Preview**.
5. The content displays using the template you choose.

Reordering Device Configurations


By changing the order of device configurations, you determine which configuration is the first acceptable configuration used by a device. Common configurations are first in the order then more specific configurations and models.

To change the Device Configuration order, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Device Configuration**.
2. Click **Reorder Device Configurations** (↕).
3. Click a configuration you want to move.



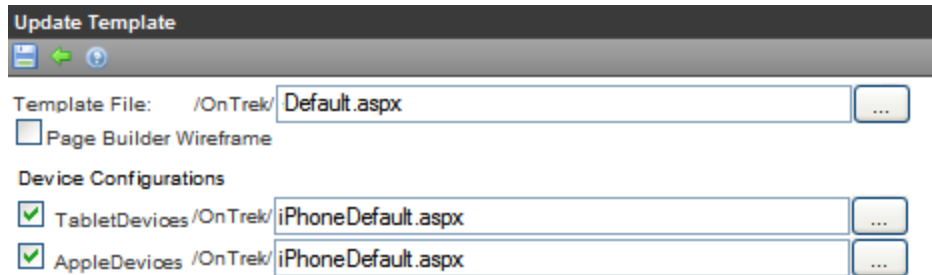
4. Click Up/Down (↕) to move it to the desired order in the list.
5. Click **Update Device Order** (📄) to save the change.
6. Editing a Device Configuration
7. To edit a device configuration, follow these steps.
8. In the Workarea, go to **Settings > Configuration > Device Configuration**.
9. Click the configuration that you want to edit.
10. You cannot edit the **Generic** configuration.
11. Click **Edit** (✎).

12. Update any of the fields on the screen. For information on the fields, see *Adding a Device Configuration* on page 14.
13. Click **Save** ()

Updating a Mobile Template

To update a mobile template reference in the Workarea, follow these steps.

1. Go to **Workarea > Settings > Configuration > Template Configuration**.
2. Click the mobile template name you want to modify.
3. When device detection is on, the Update Template window looks like this. (For more information, see *Enabling Device Detection in web.config* on page 14.)



4. Make your changes.
5. Click **Update Template** () to save your changes.

Summary of Mobile Tools by Ektron

- **Authoring Tools** - Ektron simplifies publishing web pages, microsites and marketing content, while optimizing it for both desktop and mobile viewing.
- **Mobile Optimized Controls** - Ektron's controls and APIs are optimized for mobile devices by providing simple and valid markup. Controls like content, menus, geomapping and search can be seamlessly integrated into any mobile device.
- **Mobile Device Configurations** - Create profiles for different types of mobile devices with information on how the site pages will be rendered on the device. Specify standard height and widths of the screen as well as mobile templates that will be used to display site content when accessed.
- **Associate Mobile Templates with Standard Templates** - By leveraging Ektron's template and aliasing engine, multiple templates can be associated with one master template and alias. Ektron's mobile intelligence will automatically detect and deliver the content in the relevant template for the mobile user.
- **Targeted Content Widget** - Utilize the targeted content widget to customize the visitor's experience with optimized content and customized CSS and XSLTs.
- **Contextual Preview** - When you create content and pages on your site, you can preview how the content will appear on all registered mobile devices within your browser. This eliminates the need to have all devices available to you.
- **Segmented Analytics** - Ektron helps you ensure that site visitors on mobile devices are experiencing your website as intended by using your best of breed analytics provider to segment out site traffic and content views.
- **Multivariate Testing** - Ektron's multivariate testing uncovers the best combination of content, layout and messaging for mobile viewers.
- **Brightcove Video Widget** - Mobile video's stored and played from the Brightcove Video widget are easily played on all mobile devices because of their ability to provide multi-bit streaming and multiple renditions of video files automatically.