

Testing Single Page Applications with SiteSpect

Single Page Applications (SPA) are increasingly becoming the popular choice for high-performance consumer and business web applications. They have become so popular that well-known companies such as Facebook, Overstock.com, Walmart, Trello, and Jobvite have implemented SPA frameworks to speed up the user experience and increase engagement with their own applications.

Because of the increased use of Single Page Application frameworks, many companies have sought out ways to test, target, and optimize their site's user experience. Some companies have integrated significant amounts of code into their Single Page Application for testing; however, with SiteSpect, you can optimize the entire user experience without modifying or tagging your application.

SiteSpect enables you to test your Single Page Application, just as it allows you to test the entire customer experience for your website, web app, mobile site, or mobile application.

Regardless of which SPA technology framework you are using, or whether you are trying to test a web app or mobile app, SiteSpect can bring testing, targeting, and optimization to your application. SiteSpect supports popular SPA frameworks such as Backbone, BatmanJS, CanJS, EmberJS, AngularJS, and Meteor, and can also test and optimize any other custom framework. Just as with standard HTML and CSS-based websites, A/B testing your Single Page Application can help find the optimal experience for all of your customers.

Present the Right Experience to Each Audience Segment with Targeting

Using SiteSpect, you can target audience segments based on their first visit to your web app and place them in different testing campaigns.

For example, you can test a different page layout for users based on the unique Google or Bing ad from which they were referred. Based on which ad they

clicked, the Google users may see a different page, (or different page content), than users who came from Bing.

Some of the criteria you can utilize within testing and targeting campaigns are:

- Geo-location
- User behavior
- RFM – Recency, Frequency, and Monetary value of users
- Specific action taken during current session
- Origin of visit, such as Google, Facebook, or a PPC ad
- Browser type such as MSIE vs. Chrome
- Device such as iPhone or Android
- Day- and time-parting
- Externally defined criteria, such as a CRM or SFA database

For a full list of customer and behavioral targeting criteria that SiteSpect supports, see our [Targeting and Personalization datasheet](#).

Single Page Application Testing

SiteSpect allows you to test everything on your website and web app from how it looks to how it works.

When creating a Variation of a page, you can insert any HTML, CSS, or JavaScript code into that page. In addition to the initial screen, SiteSpect can insert JavaScript or CSS code that applies to any part, component, or screen of the SPA. The code inserted can change a portion of one screen or the entire user experience for any screen within the SPA.

For example, if you want to test different checkout forms with separate lengths, SiteSpect can insert code into your SPA that enables you to create variations of the checkout form and send users to a shorter or longer version.

About SiteSpect, Inc.

SiteSpect provides the world's most comprehensive optimization platform, enabling the world's largest and most successful online businesses to significantly improve key metrics such as conversion rates and revenue. SiteSpect's solutions include A/B testing, multivariate testing, behavioral targeting and personalization, landing page optimization, mobile

web and app optimization, front-end optimization, and back-end testing. SiteSpect's patent-pending technology and professional services are used by companies such as Wal-Mart, Staples, Target, Urban Outfitters, ASOS, Overstock.com, and leading financial services companies. For more information, visit www.SiteSpect.com or call 617-859-1900.

Measure Your Single Page Application with SiteSpect Testing Campaign Reporting

Based on the testing campaign results, you can then make the winning Variation visible to all users in one click.

Within your SPA, SiteSpect enables you to measure any event, click, or action, and record that information within SiteSpect for analysis. As a result, you can measure the most important events, conversion activities, and business KPIs within your application.

For example, if you wanted to track when a user lands on a checkout screen, you can use SiteSpect EventTrack to capture and report when this screen is loaded. Within SiteSpect Reporting, you can easily view all of the client-side events along with any other metrics that

you are tracking in your Testing Campaign.

Some of the information you can measure within your SPA is:

- **User metrics** – Modal clicks, user progress (i.e. did the user make it to the checkout screen), time on site, time it takes for user to complete a checkout or lead registration, and more.
- **Conversion metrics** – average order value, checkout or lead sign-up completion, dollar values, and more.
- **Performance measurements** – Page load time, time on screen, RUM metrics, when the browser started to paint the screen, and more.

Want more information about how to test your Single Page Application with SiteSpect? Get in touch and start testing today! Call us at 617-859-1900, email us at info@sitespect.com, or visit us on the web at www.SiteSpect.com.