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Using SAS® Customer Intelligence 360 to Improve and Optimize the SAS® Web Experience

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ABSTRACT

Discover how SAS uses SAS® Customer Intelligence 360 to improve and optimize the SAS web experience for prospects and customers through data collection and analysis, content targeting and personalization, and A/B testing. These activities are designed to help strategically optimize the SAS web experience for end users by delivering more relevant, targeted experiences that result in significant business impacts for SAS.

INTRODUCTION

On any given month, SAS sees several million visitors come to the SAS web – whether it's www.sas.com, support.sas.com, blogs.sas.com, or communities.sas.com. The one thing that visitors have in common is that they came to the SAS website with a task. What that task is might be very different, but they're all looking to accomplish something. They might be an existing customer who's interested in learning "how-to" perform a task in a particular product. These visitors are looking for tutorial and documentation content. The visitor might be a prospect researching to see if SAS has solutions and products that can help solve a particular business problem for their industry. Or, maybe the visitor is a student or a professor who is looking for SAS academic software options, so they can learn SAS. The visitors, their needs, and the industries that they come from are broad and all vary. The constant is that SAS has the obligation and opportunity to provide the most optimal web experiences possible.

This paper focuses on how SAS uses the SAS Customer Intelligence 360 for their web optimization processes. These processes are focused around three key pillars: data collection, content targeting/personalization, and A/B testing.

THE PILLARS OF WEB USER EXPERIENCE OPTIMIZATION

When it comes to the SAS web experience on www.sas.com, support.sas.com, and so on, SAS has a vision and a mission to quickly, easily, and enjoyably create experiences that connect people to the things that matter. In today's world where digital reality is reality for many of us, the business impact of a poor web user experience is something that companies cannot afford. The web experience has direct impact to potential lead generation opportunities, customer retention, and brand impact.

As such, SAS believes in understanding our user's tasks as best we can and in making those tasks easy for users. A big part of that process is obviously designing, building, and deploying initial web experiences using the data and insights we have, but a bigger part of that process is focused around optimizing and improving those experiences after the web pages are built.

At SAS, we focus on these three key pillars when it comes to the web optimization process:

1. Know With Data: Understand Your Web Visitor
2. Differentiate with Targeting: One Size Doesn't Fit All
3. Optimize with Testing: Test, Learn, Improve then Repeat

These three pillars work together to allow us to collect, test and learn, and target and improve the web user experience.

KNOW WITH DATA: UNDERSTAND YOUR WEBSITE VISITOR

The foundation to building and optimizing any experience is to understand your user. In the digital world, a plethora of data can be collected and analyzed to gain that understanding. The marketing team behind www.sas.com achieves this understanding by using SAS Customer Intelligence 360.

Every hour of every day, thousands of people around the world visit www.sas.com. How do you meet the needs of each person efficiently? A one-size-fits-all approach does not fit.

It starts with data.

It starts with collecting website visitor behavior data, analyzing it, finding meaningful segments, and ultimately building models that identify personas on the website. Examples of personas at SAS are prospects, SAS users, students, and so on.

Many tools are available that tell you **what** pages were viewed **when** on your website. SAS Customer Intelligence 360 goes beyond to tell you **who** visited your site and **why**.

DATA COLLECTION

SAS Customer Intelligence 360 collects every page view from every visitor. Place one JavaScript tag on your site with your favorite tag manager and you are ready to go. SAS Customer Intelligence 360 begins collecting site visitors and their behavior in a cloud-based data hub. Each visitor receives a unique cookie. This cookie allows all future sessions to be linked back to the same visitor. At SAS, we use the same JavaScript tag across all our websites – www.sas.com, support.sas.com, blogs.sas.com, and so on, as well as subsidiaries like www.jmp.com and microsites like www.confidencequotient.com. This unique cookie enables SAS to create a centralized holistic view of an individual's journey across all www.sas.com properties over time.

You define the website events and goals to yield metrics that matter. Registering for a webinar, downloading SAS® University Edition, creating a SAS profile, contributing to SAS Communities, and submitting a Contact Us form are all activities SAS tracks to understand who someone is and why someone is on www.sas.com.

Every new site visitor is anonymous. SAS Customer Intelligence 360 uses attributes about the visitor's referring source (for example, organic search, ad banner), browser (for example, tablet, phone, PC), and IP address (for example, geo location) to immediately collect foundation information. Depending on the IP address, company and industry information might be obtainable. With this information, we build upon the foundation.

As the visitor begins to engage with SAS websites, session behavior is tracked – every keystroke is collected. One way we build on this foundation is via metadata tags. Our pages are tagged with metadata like industry and product. If a visitor views pages tagged with Retail and SAS Merchandise Planning, they have different interests and needs than someone viewing pages tagged with Banking and SAS Financial Crimes Suite. SAS Customer Intelligence 360 remembers these patterns and allows us to use them to build segments.

With the user identification feature in SAS Customer Intelligence 360, we are able to identify an individual user by email address. When an email address is entered on www.sas.com to log on to a SAS profile, register for a white paper registration, subscribe to a newsletter, or anywhere a user enters their email address, SAS Customer Intelligence 360 can identify that person as an individual. Figure 1 illustrates an example.

Future and past behavior is stitched together across devices. That opens up the doors to an array of possibilities. We can augment the information SAS Customer Intelligence 360 knows about someone with offline information from other data sources, like our Customer Relationship Management system. Through traditional customer and prospect data management, we have information such as someone's industry, job title, and role (for example, student, professor, prospect, SAS admin). We can upload these additional

attributes to the data hub for SAS Customer Intelligence 360, and use the information to further analyze behavior, find meaningful segments, and dynamically target appropriate messages to users.

Edit User Identification Definition Done Cancel

Definition name: Form w/ emailAddress

Identification type: Login

Target Location Define the click target that the user clicks for this event. ⓘ

Event Configuration

User ID Attribute

Confirm ID Event

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Email*

Country/Region

Select your country/region

Subscribe

Navigate Select Selector: input.form_button_submit[name='Submit'] Select Parent

Figure 1. User Identification Example

DATA ANALYSIS

SAS Customer Intelligence 360 reports provide quick insights as illustrated in Figure 2. Or you might download your data for unlimited analysis and integration with off-site data. We use both.

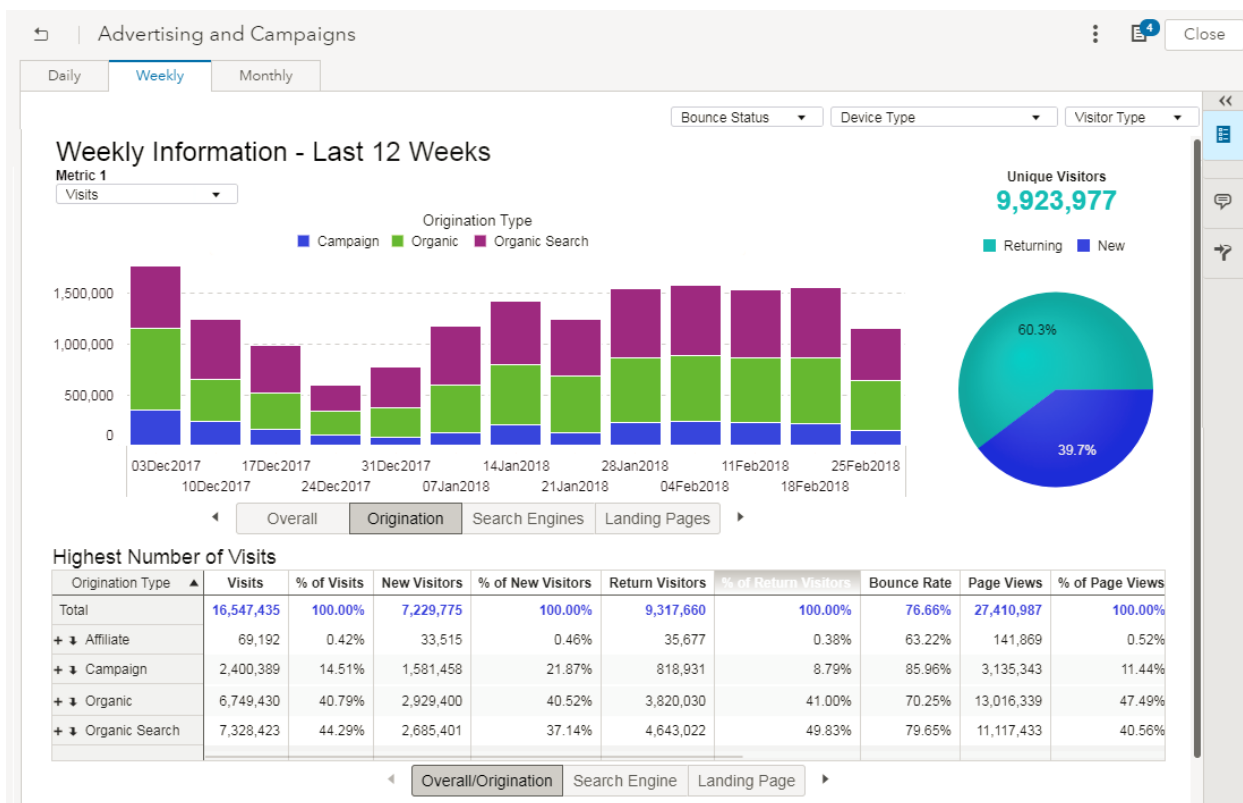


Figure 2. Sample Report

Any web page can deliver a targeted promotion to a user based on the array of attributes and behaviors collected. But which pages will benefit you and your visitors the most? We analyze site usage to identify the high traffic pages that serve a wide variety of users. Obviously, the home page is a prime candidate.

A page like the home page for www.sas.com is a common landing page that tries to meet the needs of visitors from around the world. SAS Customer Intelligence 360 can use the visitor's IP address to determine their location. Say that the MidWest SAS Users Group is holding a conference in Indianapolis. We can use site visitor's location to display an applicable promotion to people from the Ohio, Indiana, and Illinois areas. If the SouthEast Users Group is holding a conference at the same time, users from Florida can receive a different relevant promotion. But we want to do better than that. Not everyone from Chicago on www.sas.com is a SAS user and therefore not in the target audience for user group meetings. If someone is a first time visitor, different content is needed than a veteran SAS admin. Let's refine our target audience for the MidWest SAS User Group conference to people who are from the MidWest **and** are SAS users.

How do we know who is a SAS user? This is where the power of combining 360 data with off-site data excels. To determine which visitors are SAS users, we can load customer email addresses into the data hub and build a segment.

But what about site visitors who are anonymous? We analyzed a 6-month block of site visit data from 13,000 known customers. This analysis showed us how SAS users behave on www.sas.com. For example over 6 months, each SAS user viewed an average of 26.4 technical documentation pages or 4.8 pages per session. Knowing this section of www.sas.com is intended for SAS users, but sees traffic from non-users too, we set a rule that if someone views 25% of this volume of pages (7 views) within 6 months, we can confidently assume they are a SAS user (reference Figure 3). Extending this technique to areas of www.sas.com like training, communities, technical blogs, and tech support enabled us to understand which visitors – *known and anonymous* – are SAS users. That's a valuable segment.

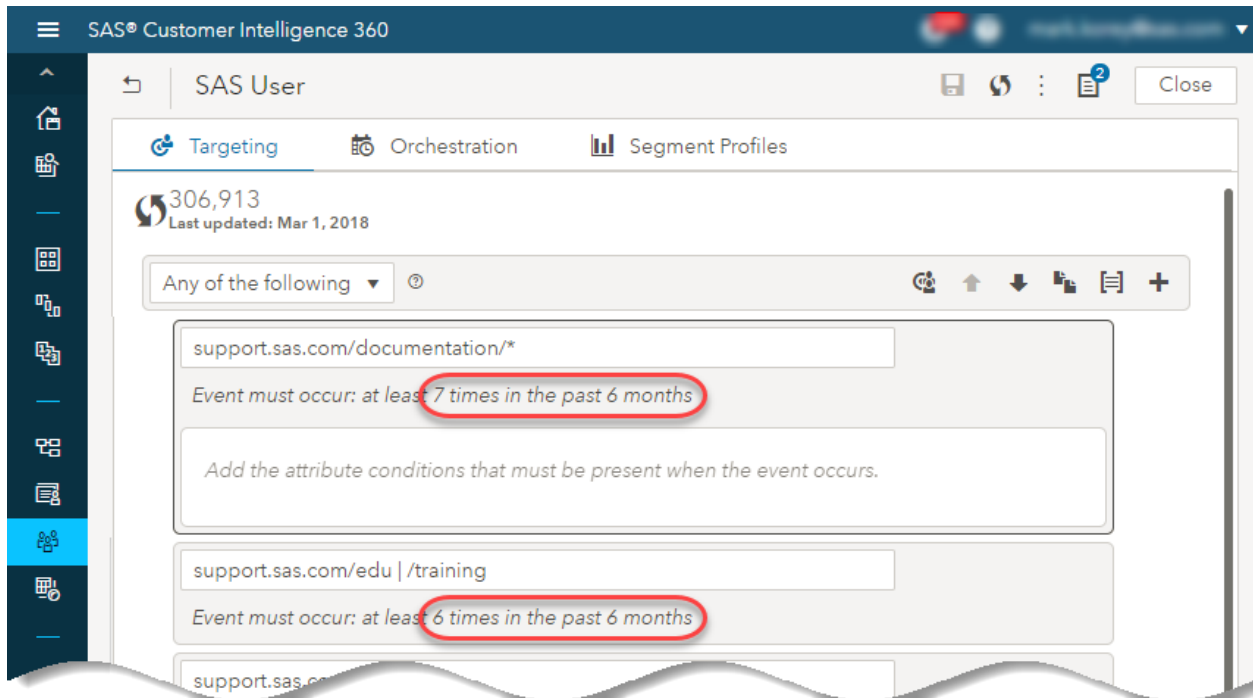


Figure 3. Engage Segmentation Example

Data analysis uncovered another huge segment on www.sas.com: students. Using the techniques outlined above, we identified which visitors on www.sas.com are students and how their behavior differs from other users. This analysis uncovered an opportunity: a lot of students submit our Contact Us form with questions addressed elsewhere on www.sas.com. If we can target students with answers to typical questions in the right place and the right time, they get answers faster and reduce the volume of Contact Us forms fielded by the SAS Customer Contact Center. Win-win.

DIFFERENTIATE WITH TARGETING: ONE SIZE DOESN'T FIT ALL

Now that we have the proper data collection within SAS Customer Intelligence 360, it's time to segment and target. We know we have lots of different people coming to perform many different tasks on www.sas.com. Using SAS Customer Intelligence 360 segments, real-time behavior triggers, off-site data, and SIC codes, we are able to show highly relevant content to our visitors and direct them quickly to the information they need for the task at hand.

An example of a real use case occurs with our Academic segment, made up of students and professors. Since fostering learning and education is a core value at SAS, we offer free software for learning SAS, statistics, analytics, and so on. So as you can imagine, we get a lot of traffic from students - which is great! However, we also get a lot of students asking for our free software from the leads system on our home page. With SAS Customer Intelligence 360, we are able to direct these visitors to an academic experience - content built just for them - using its targeting functionality.

Business Challenge

45% of our lead forms are filled out by Academics (students and professors) wanting to download SAS® University Edition, our free learning software. Having academics in our lead system delays the students from downloading what they need in real time and creates unnecessary work for sales. With SAS

Customer Intelligence 360 targeting, we were able to improve the user experience and improve business efficiency.

SAS CUSTOMER INTELLIGENCE 360 Solution

Target Academics (students and professors) by serving up an Academic-specific hero image on the www.sas.com home page. This directs them to the Academics pages where they can download SAS University Edition and serve themselves.

SAS Customer Intelligence 360 enabled us to identify students and professors using an Education SIC code (Standard Industrial Classification) and an .edu referring domain.

Was it successful? Yes! In fact, 45% of Academics in lead forms went down to 16% with targeting on just one page.

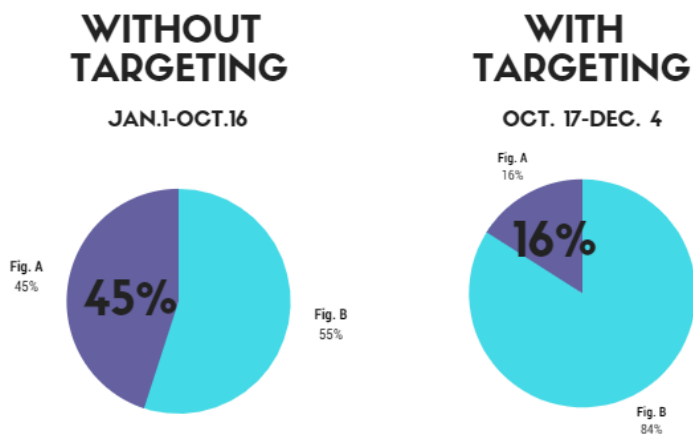


Figure: Performance report for academic content targeting

Here's how we did it:

FIRST – CHOOSE THE SPOT

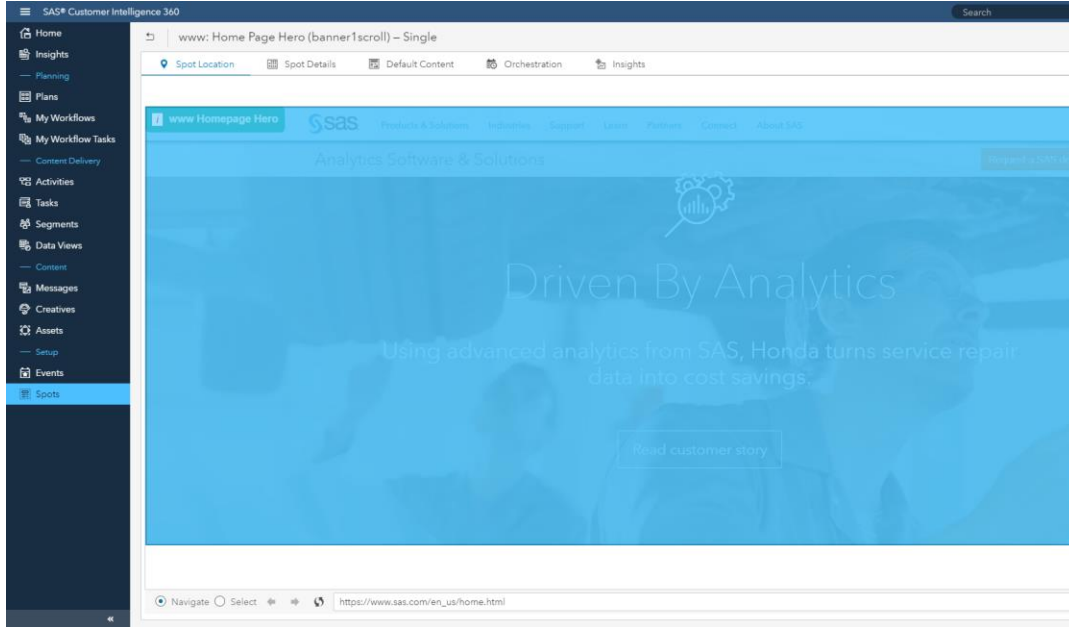


Figure 4. Spot Creation Example

SECOND – SET UP THE CREATIVE

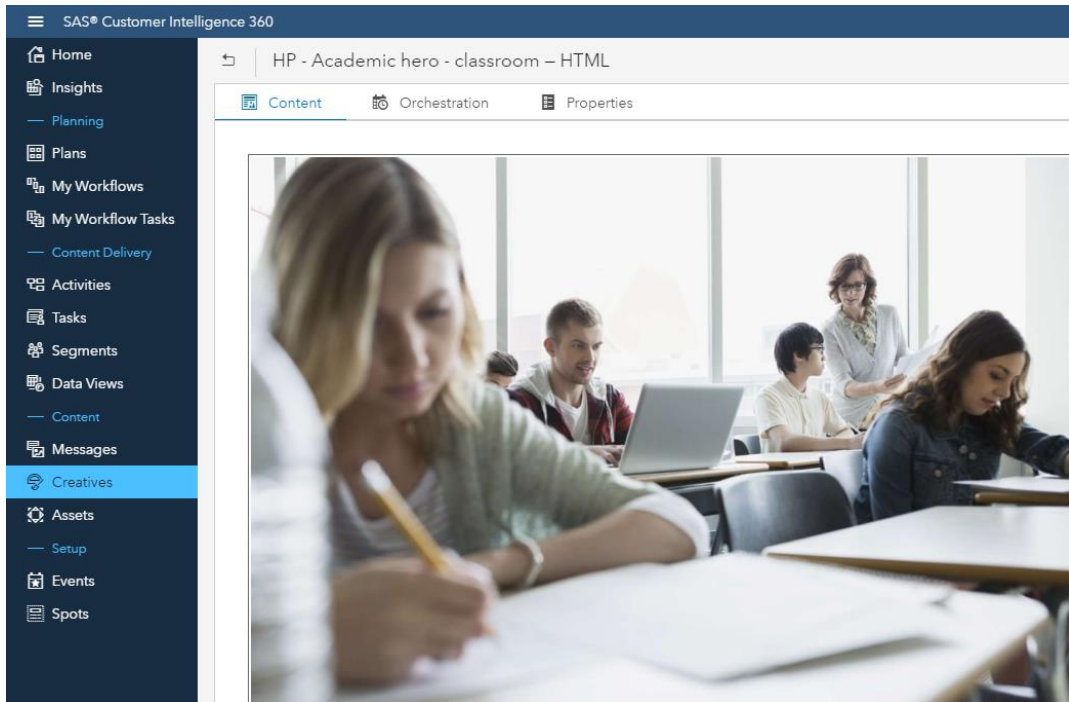


Figure 5. Creative Setup Example

THIRD – CREATE THE TASK & TARGET THE AUDIENCE

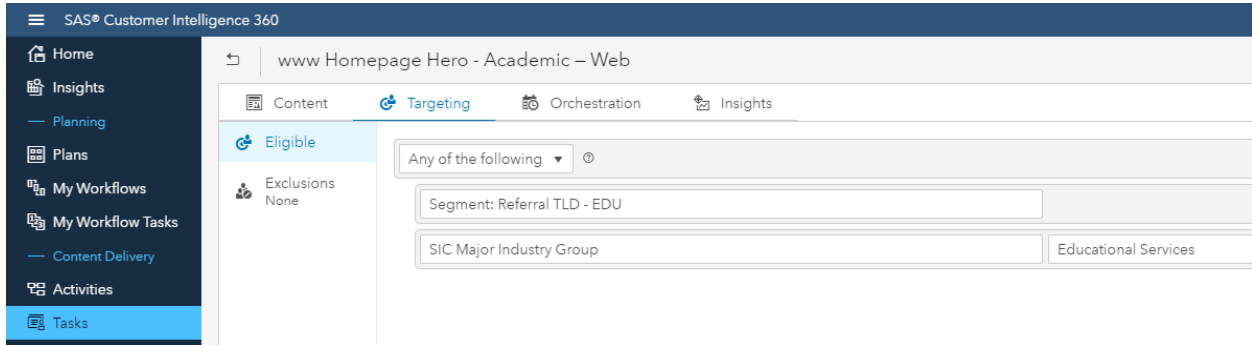


Figure 6. Task and Targeting Setup Example

Using the [SIC Code Directory](#), we targeted academic institutions. Then we targeted referring educational domains – those ending in .edu. As a result, anyone on a university campus sees the Academics hero.

FOURTH - ANALYZE PERFORMANCE

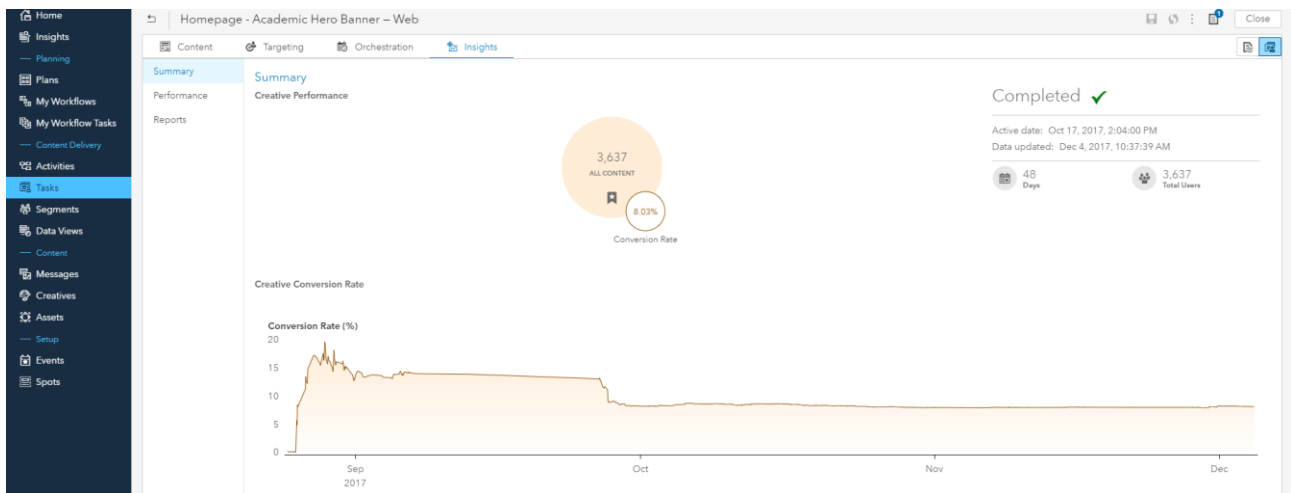


Figure 7. Analytics Reporting Example

OPTIMIZE WITH TESTING: TEST, LEARN, IMPROVE THEN REPEAT

Another way to optimize the user experience is through experimentation. Through its A/B and multivariate testing capabilities, SAS Customer Intelligence 360 allows us to take the guesswork out of creating the most optimized web experiences possible. Using experimentation, we are in constant motion testing, learning, improving, and repeating. SAS Customer Intelligence 360 is at the heart creating high-performing experiences that increase sales and engagement.

Business Opportunity

On our home page, we have a button we affectionately call “the little button that could.” It’s small but mighty. This little button generates hundreds of demo and pricing requests for sales. That’s good for SAS, but better for our site visitors because they can easily connect to the high-value task they’re looking to accomplish during their customer journey.

Given that many visitors come to the home page with tasks other than getting a software demo, we wanted to see what call-to-action would resonate more with our returning visitors.

SAS Customer Intelligence 360 Solution

Multivariate test of several call-to-action text on the “little button that could” to better understand what returning visitors found useful.

Here’s how we did it:

FIRST – CHOOSE THE SPOT

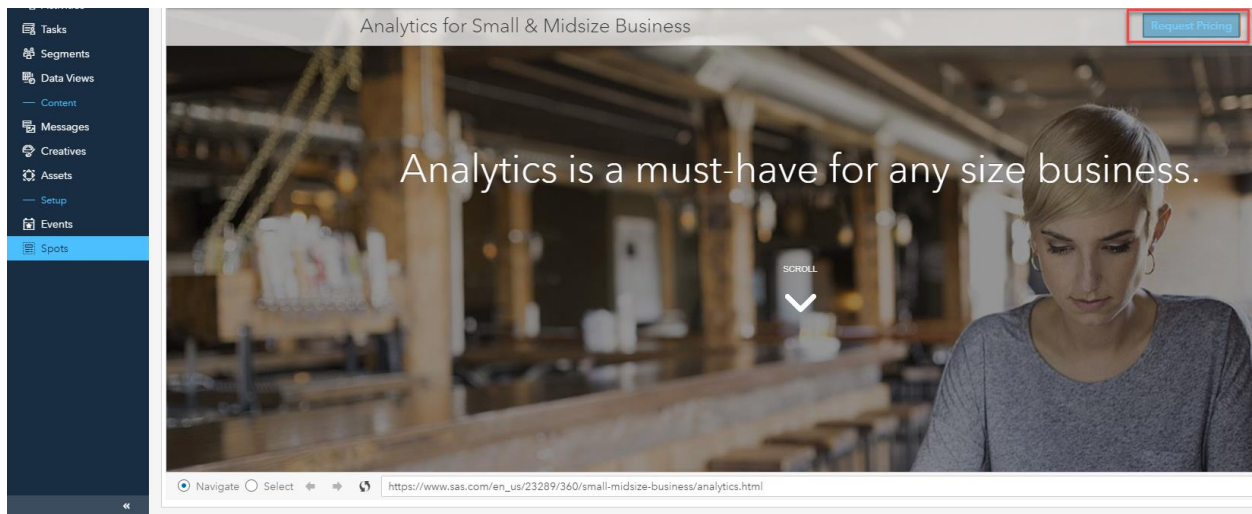


Figure 8. Spot Creation Example

SECOND – SET UP THE CREATIVES TO TEST

<input type="checkbox"/>	Title Shelf - Get Started Learning SAS	HTML	Active
<input type="checkbox"/>	Title Shelf - Explore Training Resources	HTML	Active
<input type="checkbox"/>	Title Shelf - Connect with SAS	HTML	Active
<input type="checkbox"/>	Title Shelf - Request a Demo Control	HTML	Active

Figure 9. Creative Setup Example

THIRD – CREATE THE TASK

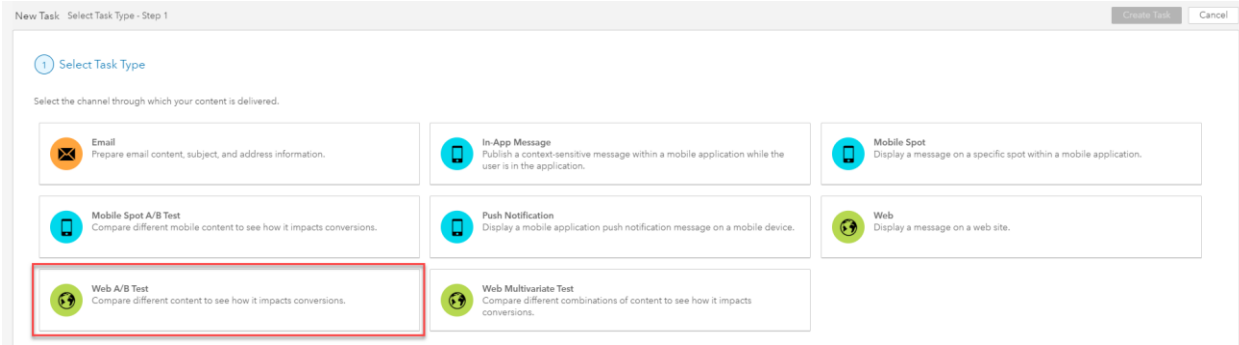


Figure 10. Task Setup Example

a. Choose the creative.

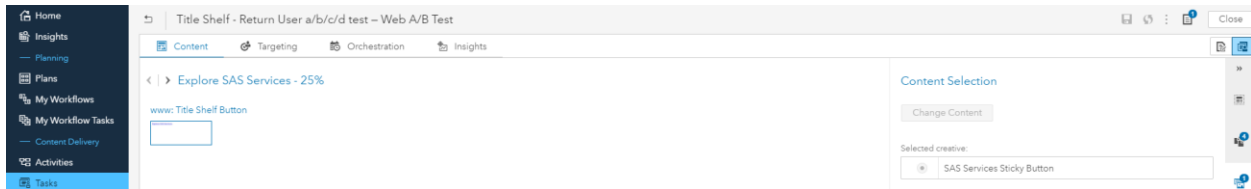


Figure 11. Creative Selection Example

b. Add the variants and set the frequency

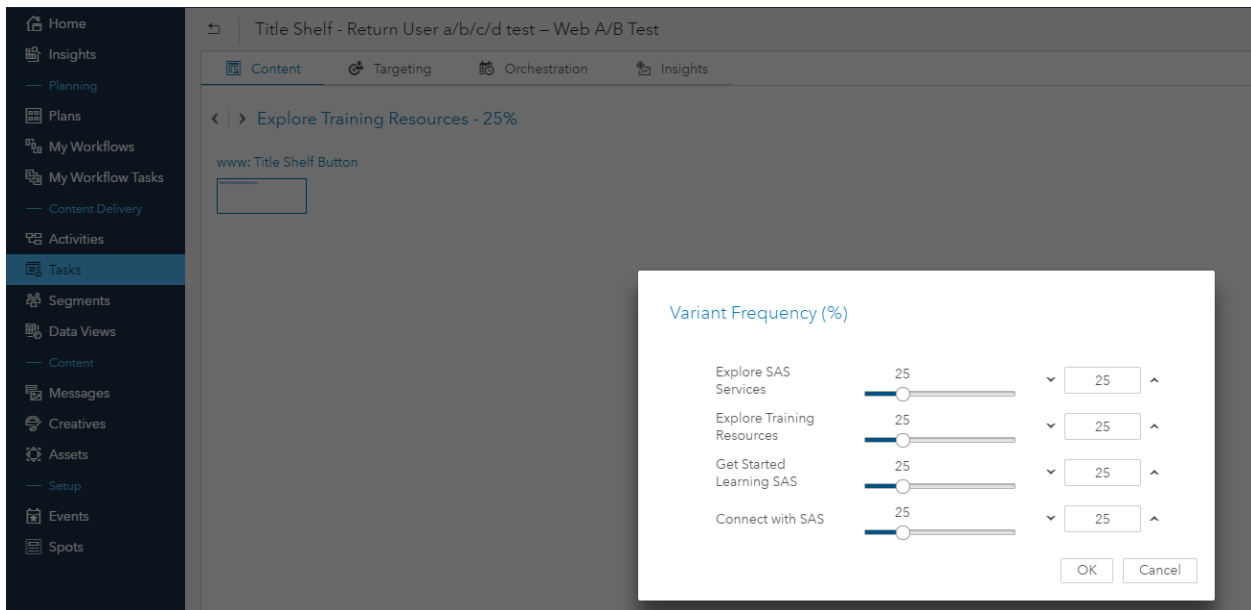


Figure 12. Testing Setup Example

c. (Optional) Target the audience

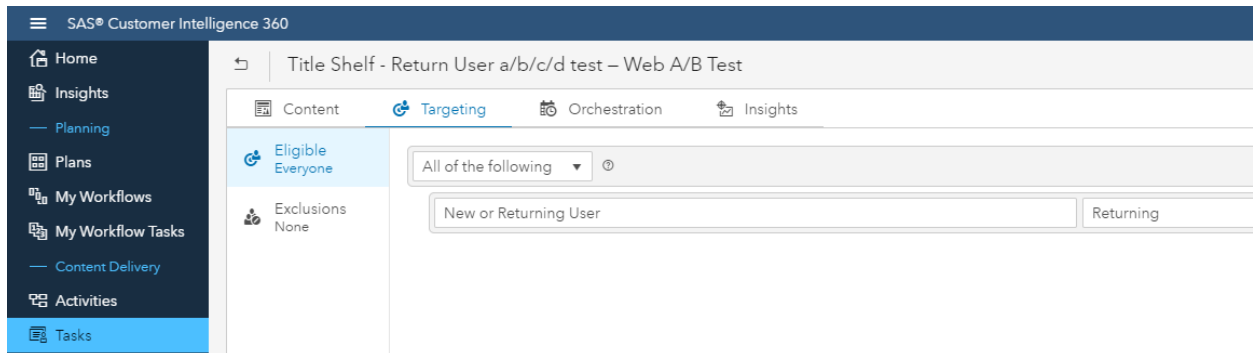


Figure 12. Targeting Setup Example – Audience Selection

FOURTH – ANALYZE PERFORMANCE

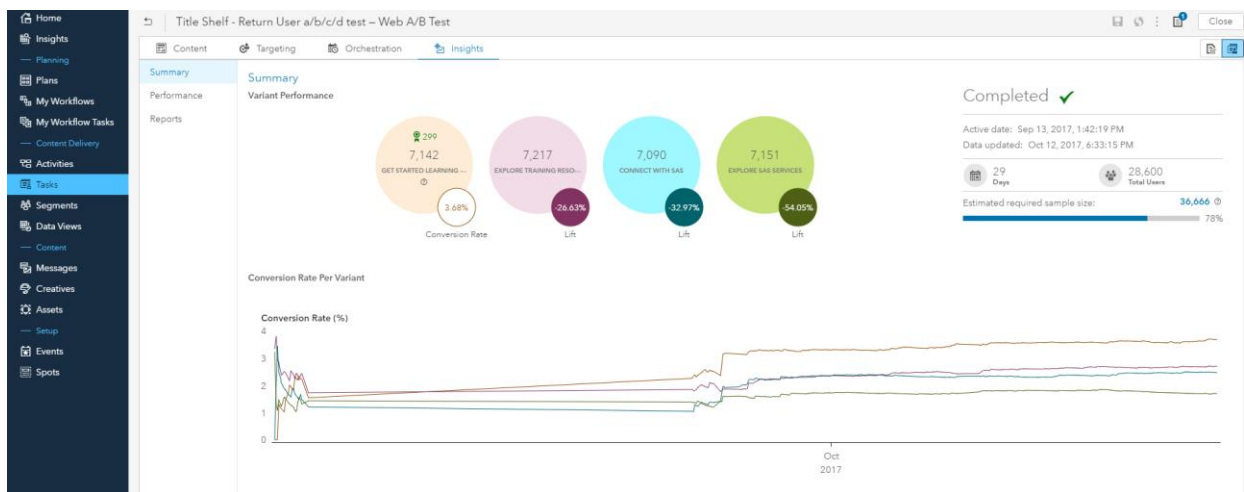


Figure 14. Analytics Reporting Example

CONCLUSION

Your organization’s digital web experience matters for your brand, for customer experience and retention, and for lead generation. A poor experience has broad, long-term ramifications for how users will perceive an organization’s brand and quality. Thus, a need to focus on always improving the web user experience through optimization, testing, and targeting is a must-have in an ever-growing digital world. With SAS Customer Intelligence 360, the foundational tools plus advanced capabilities exist to help build and constantly improve that user experience.

CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author:

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