With the Right Partners, Carnival Cruised Through a Massive Migration

How Carnival Corporation made a smooth transition from DTM to Adobe Launch

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SOLUTION

Adobe Launch

Adobe Experience Cloud

RESULTS

VALIDATED all migrated and rewritten code was producing correct outputs.

DECREASED quality assurance resources needed to validate and verify analytics implementation by 75%.

GAINED REAL-TIME VIEWS of every operation that happens on web pages.

Carnival Corporation

- www.carnival.com
- *Employs over 120,000 people*
- *Attracts 11.5 million guests annually*
- *Includes 10 cruise line brands*

ObservePoint

ObservePoint is an automated platform built to validate marketing tags and optimize digital analytics implementations.

CHALLENGES

- Effectively and efficiently migrating data

- Evaluating current coding and DTM rules to determine relevance

- Rewriting portions of code base to ensure compatibility

Carnival Corporation is the world's largest leisure travel company and is known for providing some of the top travel destinations and experiences worldwide. A holding company for well-known companies like Carnival Cruise Line, Holland America Line, and Princess Cruises, Carnival employs over 120,000 people and attracts 11.5 million guests per year.

Key to Carnival's success is its various websites that allow users to view destinations, explore activities, book travel, and more. Underpinning these websites is a robust Adobe Experience Cloud implementation to collect user data and personalize the user experience.

As Head of Global Marketing and Technology, Tim Crandley was responsible for the marketing technology for five of Carnival's brands. He was a driving force behind what was to be an arduous, but successful, migration to Adobe's new tag management system, Launch by Adobe.

"We had set a goal to switch to Launch because, as the latest technology, it works so much better," Tim explained. "However, no one has produced a button you can push and have all of your data and code magically move in perfect working order from one product to another. In the end, everything needs to be right. You need to have a plan."

Migrating from DTM to Launch

Launch by Adobe, or Adobe Launch, is Adobe's cutting-edge tag management system (TMS). Adobe Launch was built from the ground up with the goal of being highly extensible, automatable, and optimized for performance.

Carnival's TMS implementation was built using Dynamic Tag Management (DTM), Adobe's legacy TMS. But when Adobe Launch became available and Adobe announced they would sunset DTM in favor of Launch, the Carnival team began evaluating how they could proactively and effectively carry out the migration.

Challenges of migrating tag management systems

While up to the task, Carnival faced some potential obstacles. The first was how they could maintain data collection consistency during the migration. The second was how to handle the huge volume of tagging rules in the shared TMS property. Third, the team would need to work effectively with limited resources.

Maintaining consistency
The goal of a TMS migration is, at a minimum, to maintain the status quo for the marketing processes, business decisions, employees, and customers that rely on the technologies deployed via a TMS.

"ObservePoint is going to be right there behind us going through and scanning and making sure that our base implementation integrations work the same across all of the brands. With ObservePoint and Adobe Launch, we know that our tools have our back."

Tim Crandley, Head of Global Marketing Technology, Carnival Corporation

Unfortunately, migrating from one TMS to another isn't as simple as taking a snapshot of the old and uploading it into the new. For starters, the systems are different. Some DTM features and workflows had been enhanced and updated in Launch, making a one-to-one migration impossible.

Beyond that, TMS migrations are a moving target. The Carnival team had to make frequent updates at the request of their individual brands. Most weeks, brands would send 10-15 requests through, adding to the already resource-heavy initiative.

With these platform differences and frequent changes, there was no simple way to create a single source of truth to refer to during the migration. Other challenges included:

Handling volume
Because Carnival used a single DTM instance to meet the needs of all five brands, there was a huge volume of tags that needed to be evaluated and migrated. Combined with the dynamic nature of their implementation, this volume could prove to be unmanageable if handled manually.

Working efficiently with limited resources
At the time, the Carnival migration team was comprised of Tim and two others—a tagging architect and a consultant. The time they could spend on quality assurance testing was limited as it was, without even taking into account the extensive testing requirements that would come with migrating to a new tag management system. To perform QA manually during this transition would be extremely time consuming and riddled with human error.

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Pat Hillery, VP of Product at ObservePoint

Overcoming migration challenges

Carnival selected ObservePoint's WebAssurance to support the migration. This ObservePoint solution scans websites and ensures tags are in place and collecting accurate data.

"ObservePoint has been really central to our success here at Carnival since the very beginning," Tim said. "So, when we knew that we were going to have to migrate, we already had ObservePoint in place to help automate QA testing, and it just became a natural extension."

Through proprietary auditing and validation technology, WebAssurance can parse the network requests coming off a batch of pages or conversion paths, test the values against predefined rules, then notify you of any issues.

Establishing a baseline with Web Audits

Regarding this aspect of the migration, Tim said, "Like any migration, there was no output from DTM that says, 'Here are all the tags you have running, here is all the custom code you have running.'"

Before attempting the migration, Tim needed a way to create a baseline for Carnival's tags that would change with their implementation, without requiring a ton of manual work upfront. The team opted to use ObservePoint's Web Audits feature.

Web Audits are batched scans of pages that return aggregated reports showing which tags fire on each page of a site. By running periodic Web Audits of their live site and DTM implementation, the Carnival team was able to create snapshots of what their implementation looked like on any given day.

"We produced a number of ObservePoint reports that told us everything the site had on it that day," Tim explained. "Page by page, we were able to see all the tags that we needed to make sure to include in our master project plan. ObservePoint has been part of every step of our planning."

Using the results of these audits, the Carnival team was able to prioritize which tags they needed to migrate to Launch and better keep track of what they had already moved.

Moving forward with Adobe Launch

Because Carnival used the migration process as an opportunity to re-evaluate their existing system and remove unnecessary items, its Launch implementation was a much leaner, much more efficient environment.

"The migration surpassed our expectations," Tim said. "We also noted that the lean environment extends out of the digital realm and into the personnel world as well."

Carnival originally predicted that a new four-person team would be needed to help with the migration process. But, by using ObservePoint, Carnival was able to take that team down to one.

"That's what ObservePoint is there to do," Pat Hillery, VP of Product at ObservePoint, said. "We simplify and speed up the QA process and make sure you have accurate data. We're basically testing a QA solution that ensures—before you even put your analytics into production—that everything is in place and collecting data and variables as it should, so you can trust the data you're making your marketing decisions on."

What's more, since moving to Adobe Launch, the team at Carnival has more control over the digital experiences it delivers to its customers. One notable example is the ability to schedule out the order in which tags and codes fire. Using ObservePoint, the Carnival team can see every operation that currently happens on the page. They then determine in what order things should happen and schedule that order in Adobe Launch.

"This makes our experiences better and gives us another tool to understand the business impact of each action," Tim said.

This initial migration encompassed just one of Carnival's brands. The base set of rules established with ObservePoint and Adobe Launch can be applied to the new properties for the remaining brands, which will allow the team to complete the migration rapidly.

"ObservePoint is going to be right there behind us going through and scanning and making sure that our base implementation integrations work the same across all of the brands," Tim said. "With ObservePoint and Adobe Launch, we know that our tools have our back."

Testing newly developed code and side-by-side comparisons

Once migrated, the Carnival team worked to fix any errors early in their Launch implementation. "The team is small," said Tim, "and I didn't want to devote their time to fixing errors in production that we could address in development." Doing so would be a significant feat since the team had to put in a lot of legwork to update code as they transferred tags and code from DTM to Launch.

"We ended up rewriting 65% to 70% of the rules that were originally in DTM," Tim said. "It was a lengthy process, but was necessary to maintain consistent tag firing and data collection from one system to another."

The team also recognized the likelihood they'd miss something as code was rewritten. In some cases they would deprecate a piece of code because they didn't fully understand how critical it was, only to realize that particular code was necessary for a rule to function.

Using Web Audits, the team was able to easily visualize and fix these errors. By running audits of their live DTM implementation and their development Launch implementation, they were able to verify whether their tagging was the same between the two sites.

These side-by-side comparisons were especially valuable for verifying their Adobe Analytics tag was the same between the old and new systems. "We were able to validate that the code we had migrated and even rewritten was working and outputting the same results. That's where our biggest use has been."

With the migration complete, Carnival can return to normal operating procedures, but now with an enhanced system for managing the collection of campaign data. The downstream effect is that they are able to collect better data, more efficiently, and ultimately know how to deliver better digital experiences to their customers.

Working with ObservePoint, Carnival has been able to decrease the quality assurance resources needed to validate and verify its analytics implementation by almost 75%.

[Learn more](#) about how ObservePoint can help your team make a smooth migration from DTM to Adobe Launch and to continually test and validate your implementation over time.

ObservePoint

For more information
www.observepoint.com

Adobe Systems Incorporated
345 Park Avenue
San Jose, CA 95110-2704
USA
www.adobe.com