Cars.com Revs the Motor on Data Insight



FOUNDED: 1998 HEADQUARTERS: CHICAGO, IL

45

SAVED 45 HOURS IN BUSIEST MONTH THROUGH AUTOMATED REPORTING

4

UPDATED METRICS AVAILABLE UP TO 4 HOURS EARLIER EACH DAY

80

PLANNED DEPLOYMENT AN ESTIMATED 80 HOURS FASTER WITH PROFESSIONAL SERVICES Cars.com, a division of Classified Ventures, receives more than 11 million visits each month as the leading destination for online car shoppers. It offers credible and easy-to-understand information from consumers and experts to help buyers formulate opinions on what to buy, where to buy and how much to pay for a car. Cars.com wanted to provide its salespeople with easy-to-access information about how their customers' ads performed on the site. The company also wanted the ability to share similar information directly with its advertisers and with internal business users. With the help of Tableau Professional Services, Cars.com has enabled at-a-click access to Tableau dashboards from within Salesforce and the ability to publish dashboards to the company's customer portal.

One Dashboard, Multiple Channels

As one of the most popular online car shopping destinations, Cars.com depends on gathering and analyzing consumer behavior on its site to improve experiences for its visitors. It uses the same approach to help the site's paying advertisers—primarily car dealers and automotive manufacturers—improve their results.

The company's data warehouse and business intelligence team gathers and interprets site visitor data from the 11 million monthly visitors. Based on traffic volume, there is a significant amount of data stored in its 12-terabyte Teradata warehouse appliance.

"Among other things, we track impressions, conversions and other key activities a consumer can take on our site that indicate engagement

with an auto brand or to a dealership," says Kevin Wyderka, Director of Data Warehouse and Business Intelligence for Cars.com.

Wyderka knew that visualization would help several audiences make better use of this data.

"In the past, a lot of what the business analysts and power users within Cars. com did was pull data from various places into Excel. They did pretty much everything in Excel," says Wyderka. It was clear that dashboards would save these internal users a great deal of time.

Wyderka also wanted to publish dashboards outside of the Cars.com firewall for two very different audiences: advertisers and Cars.com salespeople.

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— Kevin Wyderka, Director of Data Warehouse and Business Intelligence, Cars.com advertisers," says Wyderka. "We also want to be able to publish those same dashboards to Salesforce, because most of our sales reps work strictly within that solution."

Sales Force on Salesforce

In fact, Cars.com best practices require that the more than 600-person sales team be able to do all of its work from within the cloud-based Salesforce solution.

"We don't want our salespeople logging into multiple systems to find what they need. They should be spending all of their time consulting with their customers, not logging into systems to find information," Wyderka explains.

During a call, a Cars.com sales person must be able to tell customers what ad products they've purchased, how their ads are performing, and offer tips on how to improve performance.

"In order to make information available to our sales and customer support folks who live in the Salesforce ecosystem, we were pushing lots and lots of data from our data warehouse up into the Salesforce cloud," says Wyderka. This process took up to three hours.

"Usually the warehouse was loaded by 8:00 a.m. central time, which is already 9:00 on the eastern time zone. Then, if we had to package up the data and further ship it up into Salesforce to make it available to the sales team, it could be 10:00, 11:00, or noon eastern time before users have access to the information," says Wyderka.

At times, there would be delays loading the warehouse, which slowed access to current data even further.

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Super Bowl = Super Busy

One of the busiest times for Cars. com and its customers is the month of February, so it is also a very busy time for the data warehouse and business intelligence team.

"One of our big advertising events is the Super Bowl. We've advertised in the Super Bowl for the past six years—and many of our national auto manufacturers advertiser customers also advertise on the Super Bowl," says Wyderka. "So the month of February tends to be a fairly intense time of the year when people are online shopping for vehicles."

Wyderka's team runs reports for these auto manufacturers throughout February. This manual process has been time-intensive.

"It was a manual feed of pulling data from a couple of places, mashing it up in Excel and sending it out," says Wyderka. "This took a couple of hours each day. So the report generally got to the customer by about noon their time out on the West Coast," says Wyderka.



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— Kevin Wyderka, Director of Data Warehouse and Business Intelligence,

"Tableau Was at the Top of the Shortlist"

Wyderka went looking for a data visualization and dashboarding tool that would help him improve efficiencies and complement the existing reporting platform.

"We are an SAP Business Objects shop from a reporting perspective. I wanted a tool that would augment what we have and also position us well for doing some data exploration." he says.

He turned to a consulting organization, the Chicago Business Intelligence Group, for help in narrowing the search.

"They did some investigation, and came back with a nice summary of all the different tools, where they fit in the marketplace, and what Gartner and others were saying about them," says Wyderka. "When they gave us their shortlist—Tableau was on top."

Wyderka arranged for a Tableau proof of concept (POC).

"Quite frankly, you sold my business users right out of the gate," says Wyderka. "And I had someone on my staff that came up to speed very quickly and said, 'This is great—I know I can help our user community adopt it.' So we pretty quickly landed on Tableau."

Avoid 'Scrap and Re-Work' with Professional Services

Wyderka found his data visualization answer. But now how to architect the Cars.com solution so it could meet the need of publishing dashboards to two very different audiences?

With the help of the Tableau sales representative, Cars.com determined that it needed two instances of Tableau Server: one "standard" deployment for within the Cars.com firewall and one external-facing instance that would publish to external channels.

Wyderka remembers having a lot of questions about how his team would make that work. "What do we do when we have a dashboard that should be available both inside and outside the firewall? How do we make sure we've got that in sync?"

Wyderka decided to bring in Tableau Professional Services for consulting help.

"The Professional Services consultants gave us best practices and some perspective on what they've seen at other clients," says Wyderka. "We saved a lot of time by not having to 'scrap and rework.' We were able to lay everything out in sessions with the onsite Professional Services consultant. We talked through pros and cons and we were able to get up and running quickly."

He points out that the more standard deployment within the firewall was simple to accomplish.

"Getting the internal server set up with Active Directory authentication was easy," says Wyderka. "Where the Tableau consultants really helped us was solving for the piece where we wanted to better integrate with delivery channels, like Salesforce, outside of the firewall."



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Kevin Wyderka,
Director of Data Warehouse
and Business Intelligence,
Cars.com

Tableau Professional Services

consultants worked closely with both Cars.com data warehousing architects and the Salesforce CRM team to establish token authentication between Salesforce and the external-facing Tableau Server.

The consultants also helped Wyderka's team understand how to manage and maintain the two environments from the standpoint of migrating new dashboards through the Cars.com environment, from set-up to maintenance and managing security access.

"I'm not sure how feasible it would have been without the help of the Professional Services team. At least, it would have taken us a long time to figure out how the different security and authentication options should work," says Wyderka.

Because Cars.com did not try to architect and deploy on their own, Wyderka cannot say exactly how long it would have taken—but he estimates that they saved up to 80 hours of employee time.

Cars.com currently has 45 employees authoring Tableau dashboards that are widely-used throughout the enterprise.

"There are more than 600 sales reps using at least one dashboard. And then there are other parts of the organization that use the tool for data exploration," Wyderka explains.

In order to get started, many of the Cars.com team members authoring visualizations explored online training at tableausoftware.com. Several also

attended in-person training events held in Chicago.

Wyderka is planning to bring in Tableau classroom trainers for some on-site training, when his team's schedules permit.

Super-Fast Insight for Super Bowl Season (and the Rest of the Year, Too)

This past February, the Cars.com team created a Tableau dashboard for an OEM customer that purchased ad space on the homepage.

Wyderka's team spent approximately four hours to create the visualization.

"Once we had the dashboard the way we wanted it, there was no manual intervention to refresh it. We were done. And the customer could log in every day and look at the refreshed dashboard to track how effective their advertising seemed to be on our site."

Compared with the previous, manual method, Wyderka says that his team saved 45 hours in the month of February.

Wyderka and his team appreciate that the color palette and design flexibility within Tableau that enable visualizations to match the Cars.com branding.

"We are a commercial, public website and obviously, there are design standards that the site adheres to. We were able to replicate some of those design standards in terms of color and font and things like that within Tableau," says Wyderka. "The dashboards just





Sample dashboard built to Cars.com brand standards

look like they belong to Cars.com as a brand."

That was an important consideration for these customer-facing reports, and is something that Wyderka says will continue to be valuable when the team takes the next step of publishing visualizations directly to the customer portal.

This automated reporting is useful well beyond February's busy season.

"I can refresh the warehouse, and the dashboards are immediately refreshed," says Wyderka. He points out that the new process is far more beneficial for the sales team.

"At 9:00 a.m., as the sales reps are starting their day, they can pull fresh information on their customers and they're ready to go, whereas before it may not have been available until the afternoon."

Wyderka's contact on the sales operations side has shared that the sales team's reactions to the new dashboards have been very positive.

"They like the way it looks and how they can interpret the information. And it's easy for them to get to and use," says Wyderka. "They were very excited with what we were able to accomplish."

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