AN EFFICIENT WAY TO DISCOVER NEW CUSTOMER INSIGHTS

The Dell EMC Marketing Analytics team enables a better understanding of customers by consolidating data and speeding analysis through a big data solution.

Business needs

The Dell EMC Marketing Analytics team needed to give analysts easier, faster access to customer data to determine the best ways to interact with customers.

Solutions at a glance

- Dell EMC | Cloudera® ETL Offload Reference Architecture
- Dell EMC PowerEdge R730 and R730xd rack servers powered by Intel® Xeon® processors
- Cloudera Hadoop

Business results

- Uses predictive modeling to help sales professionals target the right customer at the right time
- Reduces time-to-insight from several days to less than two hours

4x

Enables data analysis that is four times faster than before

$4mil

Realizes up to $4 million in OPEX savings
Customer data is everything to the Dell EMC Marketing Analytics team. Each customer touch point – whether it’s a phone call, email or online communication – represents a piece of data that thousands of Dell EMC sales professionals rely on to get more insight into their customers.

However, Dell EMC sales professionals needed faster, easier access to customer data for analytical purposes. “Our analytics teams needed an environment in which they could pull down and process information to inform sales teams about their customer’s interactions,” says Jeff Weidner, director of information management, Dell EMC. “Our sales teams want to know about the context of a sale or campaign that a customer engaged with. They want to know why customers engaged. The whole idea is to get the right information to the customer at the right time to close the deal. We needed to bring all customer touch points together into one consolidated space and make analysis faster and easier.”

Doing that, though, was difficult with the sales and marketing teams’ existing data warehouse. “We have multiple terabytes of online customer data spanning several years, but so many teams were competing for resources and trying to run their analytical operations on top of it,” Weidner says. The size of the database was another concern. “We’re talking about several years of customer activity from Dell.com and other Dell EMC websites. The online data alone is more than several billion records and 650 columns wide.” All of this caused performance problems. “It was difficult and time-consuming to quickly perform ad hoc queries on top of it,” says Weidner.

Creating a new platform for big data and predictive analysis

The Dell EMC Marketing Analytics team, which strives to use Dell EMC technologies whenever possible, reached out to Dell EMC IT for assistance. The analytics team worked with Dell EMC IT and partners Intel® and Cloudera to build an extract, transform and load (ETL) offload solution. They moved the data into Apache™ Hadoop® using ETL, the process by which raw data is moved from source systems, manipulated into consumable format, and loaded into a system for analytics and reporting. The solution is based on Dell EMC PowerEdge R730 and R730xd servers, both designed to run complex workloads using scalable memory and I/O capacity.

Using the Dell EMC | Cloudera solution as a blueprint, Dell EMC Marketing Analytics built an environment to augment its existing data warehouse and consolidate data from different groups within Dell EMC. “We put many of our sources – typically large, raw, or unwieldy data – into our Apache Hadoop open-source big data framework and leverage our data lake architecture to process that data with scalable options within Hadoop. That way, we can more directly enable analytics and data processing on top of Hadoop,” says Weidner.

The Dell EMC Marketing Analytics team uses an advanced analytics platform on top of the new data platform, and delivers analytical data to a select group of Dell EMC sales and marketing professionals via dashboards.

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Jeff Weidner,
Director, Information Management, Dell EMC
We can answer business questions faster with the Dell EMC | Cloudera solution. If I get an ad hoc query request from the business, I can get an answer for them within a few hours to a day. Before, it took me weeks to try to synthesize all the data.”

Jeff Weidner, Director, Information Management, Dell EMC

Using predictive analytics to increase sales

The Marketing Analytics team is able to create predictive analytics to help target customers more effectively by using its Intel-powered Dell EMC solution. “Using predictive modeling, our sales team can better target the right customer at the right time, with the right product,” Weidner says. “Many times, sales professionals are supposed to contact 10 people within a day but they only have time to do three. These models help prioritize that and create recommendations for them that help increase the potential of either closing a deal or selling an entirely new product to a customer.”

Giving Dell EMC sales and marketing teams customer insights in hours instead of weeks

The Dell EMC Marketing Analytics team can now take advantage of a faster analytical solution. “Data analysis is four times faster than the previous system in terms of processing the data,” says Weidner.

As a result, sales and marketing professionals can get faster insight into customers. “On the business side, the data analysis process went from three weeks to two hours,” says Weidner. “Instead of spending time trying to synthesize the data, Dell EMC sales and marketing professionals can create new data models instead.” Going forward, the Dell EMC Marketing Analytics team wants to transform the company’s business management systems. “We want to be able to send the consolidated data to the people who are doing content strategy,” says Weidner. “We want to send it to campaign managers so they can understand not only that people did some activity on the website that led to an order, but also who those people are and what they want.”
Enabling self-service analysis and cost savings

Now the Dell EMC Marketing Analytics team can analyze customer data rapidly, without assistance from IT. “We have more control of our customer data with the Dell EMC Cloudera solution and the data lake, and developers and analysts can work on loading and transforming the data and doing discovery with the click of a button, rather than waiting for IT to help,” says Weidner. “And we can make that data accessible to other teams because of the consolidation. If I want to get at specific customer-spend information and create a new analytical model around it, I can do that easily and get it to an analyst without mixing and matching data from different systems.”

The team is also saving money. “We can now do analytics at a low cost,” says Weidner. “I do not have to always ask management for additional capital expense per project and can leverage a scalable and versatile resource like our Hadoop environment.” Additionally, the team saves money by taking on new projects. “In the first year alone, we realized up to $4 million in OPEX savings just by bringing in two projects that were initially outsourced to another vendor,” says Weidner.

Reducing time-to-insight from several days to a few hours

With its new environment, the team can give more people access to data faster than before. “One of the things we’ve done is to reduce the process of mapping Dell EMC.com URLs to get the context of a customer’s visit to the site,” says Weidner. “But the challenge was how to do that against 3 million unique URLs and multiply it by the millions of entries we see from online traffic. That process would have taken several days in our previous environment to process a month of data. But we’ve taken that down to mere hours with the Dell EMC Cloudera solution. And we think we can reduce it even more.”

Similarly, the analytics team can perform ad hoc queries more quickly. “We can answer business questions faster with the Dell EMC Cloudera solution. If I get an ad hoc query request from the business, I can get an answer for them within a few hours to a day. Before, it took me weeks to try to synthesize all the data,” says Weidner. “That makes our stakeholders very happy.”

Overall, the Dell EMC Marketing Analytics team is helping transform data analytics by using its Dell EMC and Intel solution. “We are transforming Dell EMC by making the data faster and more available, making the analytics more streamlined, and getting multiple teams consolidated on one environment,” says Weidner. “We are further advancing and changing the company by moving to an always-on marketing approach.”