



Staying agile and effective in the 21st century

Dell deploys a big data analytics solution to understand new customer trends and update marketing models, cutting costs by \$2.5 million and boosting revenue by \$5.3 million

The digital revolution is changing how people shop. Studies show that even commercial customers spend more of their buyer journey researching solutions online before they engage a vendor. To compete, companies like Dell are transforming sales and marketing models to support these new requirements. However, doing so effectively requires a big data solution that can analyze corporate databases along with unstructured information from sources such as clickstreams and social media.

Dell has evolved into a technology leader by using efficient, data-driven processes. For decades, employees could get measurable results by using enterprise applications to support insight and facilitate processes such as customer relationship management (CRM), sales and accounting. When Dell recognized that customers were spending dramatically more time researching products online before contacting a sales representative, it wanted to update marketing models

accordingly so that it could deliver the new types of personalized services and the support that customers expected. To make such changes, however, marketing employees needed more data about customers' online behavior. Staff also needed an easier way to condense insight from numerous business intelligence (BI) tools and data sources. Drew Miller, Executive Director, Marketing Analytics and Insights at Dell, says, "There are petabytes of available information about customers' online and offline shopping habits. We just needed to give marketing employees an easy-to-use solution that could assimilate all of it, pinpoint patterns and make recommendations about marketing spend and activities."

Setting up an agile team to boost ROI with BI and analytics

To improve its global BI and analytics strategy and communications, Dell established an IT task force. Executives created a flexible governance model for the team so that it can rapidly respond to employees' evolving BI

Customer profile



Company	Dell
Industry	Technology
Country	United States
Employees	111,000
Website	www.dell.com

Business need

To stay competitive, Dell needed insight into customers' changing online and offline shopping behaviors so employees could quickly develop new multichannel marketing models.

Solution

Dell used agile and innovative processes to build a big data analytics tool that gives staff insight into corporate databases, unstructured data such as clickstreams and the return on investment (ROI) of individual marketing efforts.

Benefits

- Increases knowledge about customers
- Facilitates \$5.3 million in revenue
- Saves more than \$2.5 million in operational costs
- Boosts efficiency with one source of truth and fewer tools
- Enhances agility and competitiveness

Solutions at a glance

- Big Data
- Information Management

"We've already realized \$5.3 million in revenue by initiating more-personalized marketing programs and uncovering new opportunities with our big data Marketing Analytics Workbench."

Laxman Srigiri, Director, Marketing Analytics, Dell

and analytics requirements and deliver rapid ROI. For example, in addition to having the freedom to collaborate with internal business groups, the task force is empowered to modify business and IT processes using agile and innovative strategies. The team must dedicate more than 50 percent of its efforts identifying and implementing quick-win BI and analytics projects that are typically too small for the “A” priority list of Dell’s IT department. And the team must also spend at least 30 percent of its time evangelizing within internal business groups to raise awareness about BI’s transformative capabilities — as well as opportunities for collaboration.

One of the task force’s first projects was a new BI and analytics solution called the Marketing Analytics Workbench. Its initial application was focused on a select set of use cases around online and offline commercial customer engagements. This effort was co-funded by Dell’s IT and marketing organizations. “There was a desire to expand the usage of this solution to support many more sales and marketing activities as soon as possible. However, we knew we could build a more effective solution if we scaled it out via iterative quick sprint efforts,” says Fadi Taffal, Director, Enterprise IT at Dell.

One massive data mart facilitates a single source of truth

Working closely with marketing, task force engineers use lean software development strategies and numerous technologies to create a highly scalable data mart. The overall solution utilizes multiple technologies and tools to enable different types of data storage, manipulation and automation activities. For example, engineers store unstructured data from digital/social media sources on servers running Apache Hadoop. They use the Teradata Aster platform to then integrate and

explore large amounts of customer data from other sources in near real time. For various data transformation and automation needs, the solution includes the use of Dell’s Toad software suite, specifically Toad Data Point and Toad Intelligence Central, and Dell Statistica. Toad Data Point provides a business-friendly interface for data manipulation and automation which is a critical gap in the ecosystem. For advanced analytical models, the system uses Dell Statistica, which provides data preparation, predictive analytics, data mining and machine learning, statistics, text analytics, visualization and reporting, and model deployment and monitoring. Engineers also utilize this solution to develop analytical models that can sift through all of the disparate data and provide an accurate picture of customers’ shopping behavior. Tools provide suggestions for improving service, as well as ROI metrics for multi-vehicle strategies that include website marketing, phone calls and site visits.

Within several months, employees were using the initial Marketing Analytics Workbench. The task force plans to expand the solution’s capabilities so it can analyze data from more sources, provide additional visualizations and measure the returns of other channel activities such as tweets, texts, email messages and social media posts.

Saves more than \$2.5 million in operational costs

With its new solution, Dell has already eliminated several third-party BI applications. “Although we’re just in the initial phases of rolling out our Marketing Analytics Workbench, we’ve saved approximately \$2.5 million in vendor outsourcing costs,” says Chaitanya Laxminarayana, Marketing Program Manager at Dell. “Plus, employees gain faster and more detailed insights.” As Dell scales the Marketing Analytics

Workbench, it will phase out additional third-party BI applications, further reducing costs and boosting efficiency.

Facilitates \$5.3 million in revenue

Marketing employees now have the insight they need to identify emerging trends in customer engagements — and update models accordingly. “We’ve already realized \$5.3 million in incremental revenue by initiating more personalized marketing programs and uncovering new opportunities with our big data Marketing Analytics Workbench,” says Laxman Srigiri, Director, Marketing Analytics at Dell. “Additionally, we have programs on track to scale this impact many times over in the next three years.”

For example, employees can now see a timeline of a customer’s online and offline interactions with Dell, including purchases, the specific Dell website pages the customer visited and the files they downloaded. Plus, employees receive data-based suggestions for when and how to contact a customer, as well as the URLs of specific pages they should read to learn more about the technologies a customer is researching. Srigiri says, “It was imperative that we understand changing requirements so we could stay agile. Now that we have that insight, we can quickly develop more effective marketing models that deliver the personalized information and support customers expect.”

Products & Services

Software

Toad Data Point

Toad Intelligence Central

Dell Statistica

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