Who is Domo?
Domo offers the Domo Business Cloud, which empowers organizations of all sizes with business intelligence (BI) at cloud scale, in record time. With Domo, BI-critical processes that took weeks, months, or more can now be done on-the-fly, in minutes or seconds, up to petabyte scale.

Querying 100 Trillion Data Rows Daily
Domo believes people and data are an organization's most valuable assets in the cloud era. Many BI specialists, however, are trapped between ever-increasing user demands and the struggle among software engineers to meet sophisticated data requirements. With the Domo Business Cloud, customers can easily innovate and support legacy apps from the same system, which ensures better BI balance. Customers can dynamically integrate data from thousands of sources, turn data into live visualizations, and extend BI directly into workflows and applications that empower the entire organization. The complexities of providing cloud-based data at scale led Domo to Vertica, as Ben White, Senior Database Engineer at Domo, explains: “With our customized offering, we soon realized one size does not fit all. We were not sure how people were going to use our platform; we didn’t want to dictate use cases but rather leave this to the imagination of our customers. Hence, we needed a query engine that could respond to requirements that were as yet unknown. The Vertica Analytics Platform gave us the fastest out-of-the-box query engine in an open architecture with plenty of room for dynamic integration.”

Within just two years of its initial Vertica implementation, Domo is now relied on by more than 1,800 customers, including DHL, ESPN, L’Oréal, Telus, and Cisco. These customers query more than 100 trillion data rows daily, and Domo’s rules-based AI engine, with Vertica at its center, leverages machine learning to identify and eliminate conditions that cause poor performance. In the vast majority of cases, this is addressed before users notice any issues at all. “When we moved to Vertica in Eon Mode,” says White, “we were able to manage dynamic workloads by rapidly scaling compute resources to meet

“Our ability to ingest data from anywhere and build processes on top of that data is revolutionary in its simplicity. We regard Vertica’s advanced analytics as the bridge between the automation we build and the autonomy our customers require.”

BEN WHITE
Senior Database Engineer
Domo

Case Study
Analytics and Big Data

At a Glance

Industry
Technology—Software

Location
Utah, USA

Challenge
Provide customized, cloud-based support to query over 100 trillion data rows daily, leveraging machine learning to anticipate and eliminate conditions that cause poor performance for customers

Products and Services
Vertica in Eon Mode

Critical Success Factors
+ Reduced waste and rapidly delivered solutions with intelligently managed capacity and resources
+ Supported data-driven decision making with real-time data correlation
+ Smart database management proved effective weapon against COVID-19
“By provisioning just the right amount of compute resources for queries and just the right amount of storage resources for data, we can support variability in workloads and special projects with far less waste. Vertica in Eon Mode allows us to intelligently manage our resources.”

BEN WHITE
Senior Database Engineer
Domo

COVID-19—Balancing Public Health and the Economy

When COVID-19 struck in 2020, the whole world transitioned to a mobile workforce. Aside from mere connectivity issues, companies had to overcome issues regarding logistics, compliance, and governance, all on-the-fly, and under the stress of the pandemic. While corporations did their best to keep the global economy afloat, displaced employees and siloed information systems created a perfect storm, which made it impossible to gain a unified, global view of the effect of COVID-19. Domo realized that data analytics was not just a luxury, but could be the biggest weapon in the fight against COVID-19, as health organizations and governments worked to get a handle on the crisis.

Domo’s tracker collects data from around the globe and makes it available in its Vertica-powered platform. Now, every 10 minutes, real-time data is gathered from credible sources, including the WHO, the CDC, Johns Hopkins University, and many others. The data is correlated and made publicly available in a COVID-19 tracker where users can create their own views.

The State of Utah offers a good example. State authorities in the governor’s office struggled to gather the health data they needed to reopen the economy without endangering lives in the wake of the COVID-19 pandemic. Unfortunately, while data was available, it was siloed across legacy government systems and hospitals with limited ability for sharing and collaboration. The time it would take to collect and coordinate the data was time the state did not have.

Single Source of Truth with Domo’s COVID-19 Tracker

“In a matter of five days, we built and launched the COVID-19 Crisis Command Center for the State of Utah,” says White. “Leveraging smart database management, we combined disparate data sources from Utah’s Department of Health, Department of Transportation, and Technology Services with private sector data sources, including hospital and retail data, to paint a more complete picture. This created a single source of truth to help guide actions and inform decisions as the state moved through different phases of its COVID-19 response, allowing it to identify and solve issues at the local level instead of relying on sweeping statewide initiatives.”

Government leaders, procurement teams, EMTs, and other professionals can act and collaborate on the same data in a democratized model to recognize trends and make informed decisions. Real-time data about hospital bed capacity, testing, number of cases, and transmission rates puts valuable information quickly into the hands of the experts who can put that knowledge to best use. A personal protective equipment (PPE) app checks current supply levels, tracks incoming orders, and alerts when PPE supplies are running low. Executive Director of the Governor’s Office of Management and Budget for the State of Utah, Kristen Cox, was delighted. “Domo has been the difference between reacting to a crisis and resolving a crisis. It’s given us the insight we needed to make good decisions for the people we serve,” she said.

Ben White reflected on Vertica’s role in the success of Domo during these past months of COVID-19: “The Vertica capabilities are at the source of our delivery model. Our ability to ingest data from anywhere and build processes on top of that data is revolutionary in its simplicity. We regard Vertica’s advanced analytics as the bridge between the automation we build and the autonomy our customers require.”

Smart Database Management in the Fight Against COVID-19

Domo has also created a Get Back to Work resource center, which provides solutions to leverage data intelligence in helping businesses reopen safely during the COVID-19 crisis and beyond. Having data readily available helps employers focus on staff safety as well as business continuity. With apps for contact tracing, temperature checks, training, and compliance with new protocols, along with facilities that provide clear cleaning guidelines and techniques, employees feel safe to return to work, and management is empowered to protect their most valuable asset: people.

White concludes: “Smart database management means we can share data and content externally at scale, transforming the way our customers do business. Vertica has helped position us to make a real impact in the fight against COVID-19. We continue to build better predictive models into the tools, bringing more machine learning and AI into our customer’s analysis and decision making.”