The Computerworld Honors Program

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Final Copy of Case Study

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New York, NY, US

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STATUS:
Laureate

CATEGORY:
Business Responsiveness

ORGANIZATION:
Vertica Systems

ORGANIZATION URL:
http://www.vertica.com

PROJECT NAME:
Vertica Analytics Platform

PROJECT OVERVIEW

Organizations of all sizes are drowning in information. As more and more data sources are incorporated into an organization's business intelligence workflow – email, text messages, network performance data, sensor information, documents, and more – the challenge is to turn this raw data into actionable information. Information that can provide a distinct competitive advantage and drive new revenue sources and significant savings. The Vertica Analytics Platform is designed from the ground up to help organizations of all sizes monetize their data in real time and at a much larger scale than ever before. With data warehouses and data marts ranging from hundreds of gigabytes to multi-petabytes, Vertica's 325+ customers are redefining the speed of business and enhancing their competitive advantage with Vertica. Easy to use and fast to deploy, the Vertica Analytics Platform allows all types of users in an organization (not just DBAs) to get up and running quickly and immediately start making sense of mission-critical data. Vertica offers the flexibility to deploy business intelligence where it's needed – on industry-standard hardware, virtual machines (private cloud), or in the public cloud – offering the flexibility to put data where it makes sense for the organization. At its core, the Vertica Analytics Platform includes a columnar database, built from the ground up to take advantage of a Massively Parallel Processing (MPP) architecture, delivering exceptional performance that scales linearly as resources are added. Offering a familiar interface and hooks into the analytics ecosystem – from ETL tools to visualization – Vertica easily integrates with an organization's existing analytics environment. The Vertica Analytics Platform offers a host of benefits, including: * Real-Time Analytics: Load and query data in real time, allowing blazing fast access to business-critical information * Short Time to Value: Quick installation, automated database design, and familiar interfaces to get up and running in minutes instead of days * Easy to Use: Industry-standard SQL and robust in-database analytics make data accessible to anyone in the organization, not just DBAs * Extreme Scalability: Quick loading and querying, as well as the ability to store massive amounts of data in a small footprint * Flexible Deployment: Deploy on industry-standard hardware, virtual machines (private

cloud), or on the cloud * Always On: An innovative replication schema promotes performance and redundancy * Green: Huge databases can be stored in a much smaller footprint – less hardware and cooling What makes the Vertica Analytics Platform unique is its ability to analyze massive amounts of disparate information at near real time. Delivering actionable information in near real time allows companies to quickly determine what is actually happening in their business and the speed to make decisions quickly. With analytics applications ranging from network performance, healthcare records, web site clickstreams, financial market data, advertising performance, and much more, the Vertica Analytics Platform is designed for big data at a time when big data is no longer just for big companies.

SOCIETAL BENEFITS

The Vertica Analytics Platform benefits society by providing an affordable solution for big data analytics that scales. Vertica delivers 50x-1000x faster performance at 30% the cost of traditional solutions, and is used across a variety of industries including Groupon, Twitter, Verizon, AOL, Guess?, Zynga, BlueCross BlueShield, AdMeld, Mozilla and Comcast.

PROJECT BENEFIT EXAMPLE

Comcast: Faster data analysis yields competitive advantage. Challenge: Comcast network operators must be able to quickly collect and analyze data being generated by devices in the network. Monitoring networks in a cost-effective manner is a particularly acute issue for Comcast, as its network has millions of components, and there are billions of metrics that could indicate a potential service interruption or other problem. Solution: Using Vertica, Comcast built a network performance monitoring data warehouse. The company is now able to monitor millions of network devices to ensure quality of service and accuracy of capacity planning. The innovative system meets rigorous fault-tolerance and recovery tests and delivers sub-second query performance. Testimonial: "Vertica opened doors to analyses that otherwise were either too time-intensive or impossible. A larger team of business managers now have faster, easier access to more information. That knowledge is invaluable in an aggressively competitive market like ours." Brian Harvell, Executive director for network operations, Comcast PinkOTC: Market analytics delivered real-time. Challenge: Pink OTC Markets needed a comprehensive repository for all its data – one that provided a holistic view across all data sources and enabled faster time-to-market for new applications and reports. The repository had to accommodate fast, ad-hoc queries and real-time data loading. It also needed to enable new insights into data and allow Pink OTC Markets to create data marts for different reporting functions. Solution: Using Vertica, the company built a new system that supported real-time market analytics. Now ad hoc queries of detail data in billions of records are performed with no cubes or summary tables. The new solution is 100X -100,000X faster than traditional RDBMS and programmers can create new reports in minutes not days, using SQL skills. Testimonial: "Our first proof-of concept with Vertica was very encouraging. When we loaded in some of our tables and ran our initial queries, we were blown away by how fast the Vertica Database was." Rahul Bose, Director of Applications Development, Pink OTC Markets hMetrix: New BI solution improves company performance. Challenge: HMetrix suddenly needed a way to move its reporting out of the back room and into a more interactive, non-technical user environment while ensuring extreme ease of use and accommodating the size of the datasets. Solution: The company used Vertica to build a robust healthcare business intelligence platform. This data warehouse enables complex ad hoc querying of large datasets by healthcare professionals. The point and click, visual data analyses with Tableau enable faster, better and more strategic decisions. Query performance was improved by an average of 70X. Testimonial: "Using Tableau and Vertica together gives us and our

clients a competitive edge by being able to query data in an ad-hoc way 70 times faster than with our old database." George Chalissery, CEO , HMetrix

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes