The Vertica + VAST Data Advantage
Organizations require many databases to manage varying data workloads. For the most critical analytical workloads that require the highest levels of performance at scale, Vertica is the proven, leading analytical database. As a vital complement to Vertica, VAST Data’s Universal Storage allows customers to benefit from real-time storage performance for all their use-cases, ranging from data warehouse analytics and ad-hoc queries to complex data science jobs.

Here are the top five ways that Vertica differentiates itself from a range of competitors:

1. **Enable Performance at Scale**
   - **Purpose-Built, High-Scale SQL Analytical Database:** Vertica was built from the very first line of code as a Massively Parallel Processing (MPP) columnar SQL database with hundreds of built-in analytical functions. A leader in the adtech industry runs Vertica on two 640-node clusters, analyzing more than 15 PB of data and processing more than 40,000 daily reports.
   - **Massively-Parallel Scalability:** VAST Data’s unique disaggregated shared everything (DASE) architecture, enables extreme parallel scale, delivering radical concurrency and real-time access to all your data. With no east-west cluster traffic, DASE enables virtually unlimited linear scaling. In addition, DASE allows customers to scale the performance independently from the capacity of their system.

2. **Unify Data Warehouse, Database, and Data Lake in One**
   Together, VAST Data and Vertica deliver a unified data analytics platform that helps enterprises consolidate their structured, semi-structured, and unstructured data silos on a flash-powered data lake.
   - **Unified Analytics:** Customers gain a proven analytical database for fast BI workloads with ACID compliance, ANSI standard SQL, and solid governance, reliability, and security.
   - **Supports a Broad Ecosystem:** Vertica integrates with all key technologies common in data pipelines such as ETL tools, Spark, and Kafka; data visualization tools such as Tableau and Power BI; machine learning tools such as Python and R, and more via an extensible SDK.
   - **Data Warehouse:** Consolidate data warehouses and data lakes on VAST Data as a single, unified repository for Vertica and deliver fast, scalable data warehouse analytics on structured data.

3. **Consolidate all Analytic Use-cases on a Single Universal Namespace**
   VAST’s Universal Storage delivers dedicated Quality of Service (QoS) for Vertica sub-clusters supporting different departments. Dedicated QoS ensures demanding analytics jobs don’t prevent queries or dashboards from loading.
   - **Hot Data/Cold Data Workloads:** Vertica offers a database for fast, ACID-compliant workloads, as well as the capability to access external tables like ORC and PARQUET in the data lake. The code is the same, no matter where the data lies.
   - **Dedicated Quality of Service (QoS):** VAST Data’s DASE architecture allows customers to pool compute servers to provide dedicated QoS for competing Vertica use cases on the same namespace, allowing them to run dashboards, batch reports, ad-hoc queries, and complex data science jobs without any performance impact.
4. Enterprise Grade Platform

- **Highest Customer Satisfaction Scores**: Leading tech peer review site, G2, ranked Vertica as a High Performer in the Top 10 Data Warehouse Software category, with more than 90% of customer reviews at 4 or 5 stars. Both solutions are rating highly for customer satisfaction in Gartner Peer Review.

- **Enterprise Storage Capabilities**: VAST Data's Universal Storage is an enterprise grade NAS and object storage platform that delivers critical enterprise ready features such as snapshot & object immutability, snap-to-s3 replication, all-flash instant restores, advanced S3 lifecycle policies, cloud-based fleet management, and many more.

5. Total Cost of Ownership

- **All-Inclusive License**: A single license includes every Vertica function, from BI to time series to geospatial to machine learning, with no additional components to buy. The license also includes dev, QA, and HA clusters at no additional cost.

- **Major ROI and Fast Pay Back**: Forrester's Total Economic Impact study uncovered a three-year customer ROI of 385%, a net present value of $10.1 million, and a payback period of less than six months for Vertica.

- **VAST Delivers Radical Savings & Efficiency**: VAST Universal Storage combines flash innovations with DASE’s architectural brilliance to deliver a compounded level of storage savings that make flash affordable for all your data. Get industry leading data-reduction that delivers 1.5:1 additional data reduction for pre-compressed Parquet files and 3.5:1 for uncompressed CSV files. This combined with VAST’s 10-year warranty protects you from the costly forklift upgrades that legacy vendors impose on customers, while delivering 2x better data center density and all-flash performance at ½ the cost.

Quick Stats:

- Hundreds of petabytes managed

- Top industries include Communications, Media, and Entertainment, Financial Services, Healthcare, Technology, and Telco. Vertica queries run queries 3x faster when powered by Universal Storage.

To experience the fastest analytics and machine learning from start to finish, contact us for a free trial or proof of concept (POC).

https://vastdata.com/scale-out-solutions/vertica/