Unlocking the Full Value of Your Data:

How to Successfully Scale Machine Learning Data Analytics with Teradata and Microsoft Azure

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The New Frontier of Data Analytics

Machine learning (ML) has become the new frontier of data analytics. ML promises what human-powered data analytics solutions have mostly been unable to realize: the ability to analyze huge data sets from multiple sources to generate accurate and important new business insights.

The problem? Artificial intelligence (AI) and ML initiatives are hard to get off the ground.

The New Frontier of Data Analytics

According to Gartner, only a little over half of ML data projects make it into production.[1]

ALMOST
96%
of surveyed organizations have an ML project in limited production[2]

ONLY
26%
of projects make it to widespread production[2]

That's double the number of projects versus just two years ago, but it's still just a sliver of the pie.

The fact is businesses prioritize becoming data-driven organizations.

97%
are investing in data initiatives[3]

91%
are investing specifically in ML-led analytics[3]

However, those organizations able to embrace ML *now* can earn a significant competitive advantage today and over the long run.

How can your organization defy the odds and make it happen?

1. https://www.gartner.com/en/newsroom/press-releases/2022-08-22-gartner-survey-reveals-80-percent-of-executives-think-automation-can-be-applied-to-any-business-decision
2. https://www.businesswire.com/news/home/20220103005036/en/NewVantage-Partners-Releases-2022-Data-And-AI-Executive-Survey
3. *Ibid*

The Secret to Game-Changing ML Data Analytics

If you want to ensure your ML data initiatives work from pilot to production, you'll need a seamless pairing of an advanced analytics solution with a cloud data platform that delivers faster access, better governance, and connected analytics capabilities.

This will help you successfully unlock the value of your data by:

Creating a holistic data environment by ingesting and preparing a wide variety of data sources

Activating analytics with flexible, ML-led model creation and scoring

Enabling rollout of data analytics with autonomy and ease-of-access to deliver real-time insights and optimize business results across your organization

In this ebook, we'll look at how **Teradata VantageCloud with ClearScape Analytics™** and **Microsoft Azure Machine Learning** are helping organizations like yours transform data sources into valuable, game-changing analytics in these three unique ways. But first, let's get to know VantageCloud and its integration with Azure Machine Learning.

The Powerful Pairing of Cloud Data and Machine Learning

ML enables high-value data analytics that lay the groundwork for better decision-making to sharpen your competitive edge, drive operational efficiencies, and maximize growth.

VantageCloud is a complete cloud analytics and data platform with next-generation, cloud-native deployment and expanded analytics capabilities. Combining this performance with a seamless integration of Azure Machine Learning tools and languages makes it possible to unleash the full potential of your ML investments by building, deploying and managing more high-quality models in production. Together, they deliver:

Faster training of ML for data analytics modeling

Easier deployment of ML initiatives across the organization

Seamless access for autonomous insight generation in any part of your business

Let's examine the three ways VantageCloud and Azure Machine Learning make this happen.

1. Creating a Holistic Data Environment with VantageCloud

To leverage your full data ecosystem, it's critical to overcome the obstacles that limit enterprise-scale analytics. One of those obstacles is the inability to successfully aggregate disparate data sources.

VantageCloud's cloud-native architecture quickly connects data sets that span a diverse environment of third-party systems, data lakes, and object stores. Then, with ClearScape Analytics, a connected portfolio of embedded analytics capabilities, data can be prepped for Azure Machine Learning.

AT WORK IN HEALTHCARE

A global healthcare company with over 600,000 installed products used to make over 70% of critical clinical decisions relies on VantageCloud and Azure to help digitize next-gen healthcare delivery.

2. Activating Analytics with Azure Machine Learning

Once data is prepped for analysis, Azure Machine Learning helps you accelerate and manage your ML project lifecycle, from training and deploying models to managing MLOps. Azure Machine Learning makes it possible to fast-track production with tools that:

- Accelerate and automate daily workflows

- Integrate analytics models into applications or services

- Build advanced ML tooling with support from durable APIs

- Deploy, manage and govern models easily and at scale

- Run ML workloads anywhere with built-in governance, security, and compliance

AT WORK IN RETAIL

A chain with more than 200 retail stores centralized and integrated product, sales, and finance data with VantageCloud and Azure to create deeper business insights through advanced analytics.

3. Rolling Out Data Access to Users

With workflows, models, and security in place, now you can rollout data access to users across your organization to start generating insightful and actionable insights. This means all parts of your business can run at-will analytics projects with shared data to:

- Promote user autonomy with an easy-to-use console and analytics tools

- Accelerate business outcomes with analytics that utilize your entire data environment

- Maintain visibility with governance policies that help limit shadow IT

- Guarantee critical SLAs with tiered storage and elastic workloads

The ability for VantageCloud and Azure Machine Learning to pair seamlessly makes your transition to a data-driven organization that much easier. But what else does VantageCloud bring to the table?
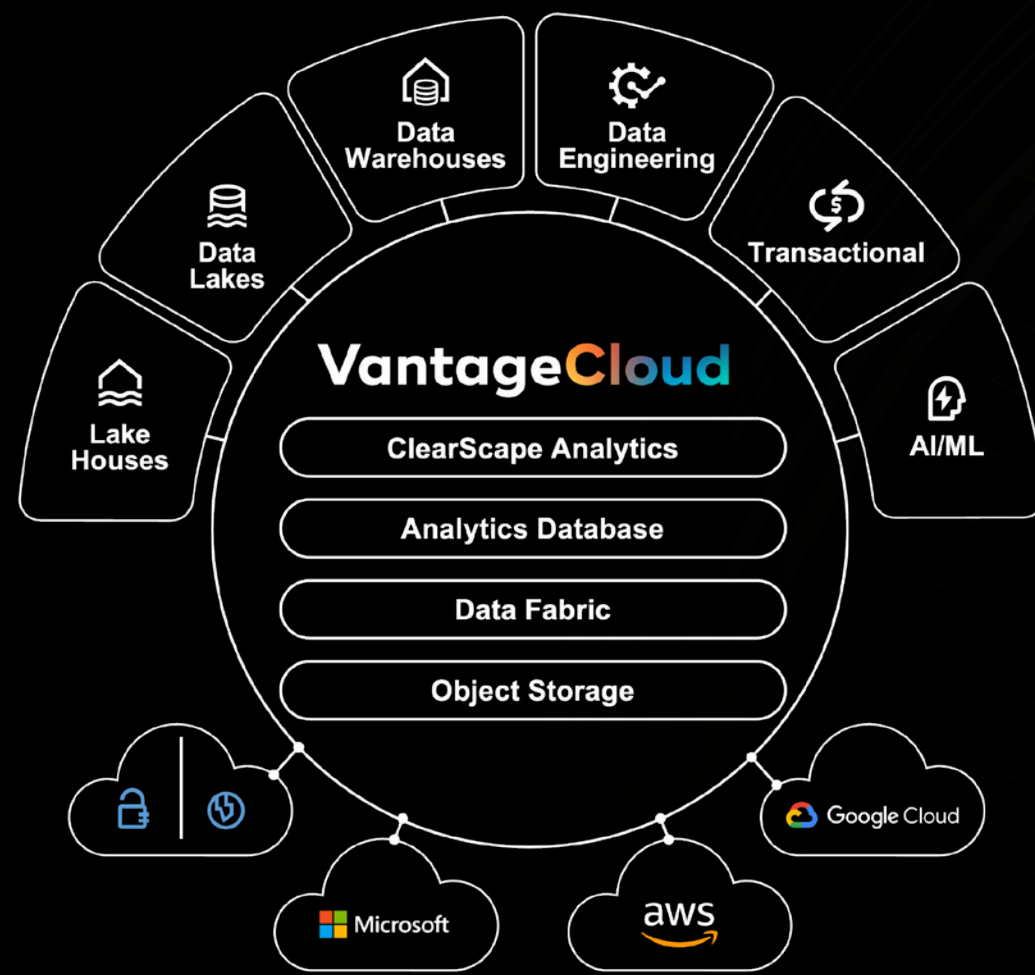
AT WORK IN CONSUMER PRODUCTS

The world's leading multinational food, snack, and beverage corporation adopted VantageCloud and Azure to double its analytics capabilities and innovate faster.

Teradata VantageCloud – Driving Data Innovation

VantageCloud is designed for the future of business: the multi-cloud world. It enables you to meet the increasingly diverse analytics and data needs of your evolving business with a flexible, low-cost strategy to modernize your data ecosystem.

VantageCloud is available in two deployment options that can be combined into a complete cloud analytics and data platform:

VantageCloud Lake

Teradata's flagship platform built on a next-gen, cloud-native architecture to bring enterprise data and advanced analytics to more business use cases.

VantageCloud Enterprise

Power platform used by organizations around the world to run critical, IT-managed enterprise workloads with the best performance available.

Both deployments integrate Teradata's powerful, industry-leading ClearScape Analytics tools and connected analytics capabilities. Together, these solutions make it easier for your organization to balance business autonomy and governance with the drive to innovate.

Paving the Way for Innovation at Scale

Today, it's possible to imagine solving your most complex business challenges with ML-led data insights. The trick is getting your ML analytics initiatives off the ground—and out the door.

With **VantageCloud** and **Azure Machine Learning,** it's easier than ever to drive analytic innovation at scale. From next-generation cloud data aggregation to advanced analytics, this powerful combination provides everything you need to unlock your data, activate analytics, and accelerate value.

Transform your data—and your business—with Teradata.

To speak with one of our AI/ML experts and experience a live demo, **visit our website.**

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