# Scalable Acceleration and Automation for the ML Lifecycle

Give stakeholders across the enterprise access to more insights. With Teradata VantageCloud and Azure Machine Learning, you can enhance your advanced analytics projects' time to value, unlocking the full power of your data.

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# What's the cost of the Al/ML scalability dilemma?

The top reasons enterprise analytics projects fail include:

- Inefficient data preparation
- Lack of flexibility to use preferred tools/models
- Difficulty scoring data live at scale

Recent estimates suggested between \$9.5 and \$15.4 trillion in value could be unlocked with advanced analytics.<sup>1</sup> Artificial intelligence (AI) and machine learning (ML) were highlighted as crucial drivers of that value. But despite increased investments in analytics solutions,

But despite increased investments in analytics solutions AI, and ML, companies today are still struggling to capture real value from their analytics projects. Gartner predicts only 20% of analytic insights will deliver business outcomes.<sup>2</sup>

### \$15.4 trillion

Value that can be unlocked with advanced analytics

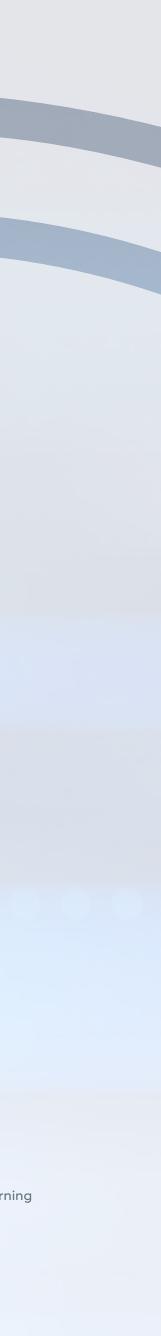
### 74%

Organizations that haven't moved their Big Data/AI initiatives into widespread production<sup>3</sup>

### 20%

Of analytic insights will deliver business outcomes

1 McKinsey Global Institute, Notes from the Al Frontier: Applications and value of deep learning
2 Gartner, Our Top Data and Analytics Predicts for 2019, Andrew White, January 3, 2019
3 2022 NewVantage Partners Data and Al Leadership Executive Survey



# Move AI/ML projects into wide-scale production in weeks with Teradata and Microsoft

Together, Teradata VantageCloud and Azure Machine Learning empower enterprises to overcome scalability challenges and quickly drive measurable business value from their analytics investments.

**Teradata VantageCloud** is the complete cloud analytics and data platform to democratize data access, operationalize analytics, and reduce waste through improved cost visibility and management. The cloud-native architecture scales elastically and cost effectively to meet organizational needs and executes complex analytics with data science tools and languages such as Azure ML.

#### Teradata ClearScape Analytics are

the powerful and connected analytic capabilities embedded in VantageCloud that accelerate data preparation and can be used to deploy and monitor models at scale. Azure Machine Learning is a fully managed service that empowers data scientists and developers to build, deploy, and manage high-quality models faster and with confidence. Azure ML runs on premises, in multi-cloud environments, and at the edge.



# Drive faster time-to-value and greater ROI with analytics solutions that put you first

The seamless integration between Azure ML and VantageCloud makes it easier to divide the analytics process into three phases. The result is greater efficiency and flexibility to architect the best solution using the appropriate technology, languages, and frameworks.

#### **ANALYTICS 1-2-3**

#### **Step 1: Prepare data**

With VantageCloud, organizations can quickly connect disparate data sets across third-party systems, data lakes, and object stores. Using ClearScape Analytics, data can be transformed into rich, reusable analytic data sets that can be landed automatically and at scale in Azure Blob Storage.

#### **Step 2: Train models**

Azure ML can use the analytic data sets from Blob Storage to build and train high-quality ML models fast by providing a broad set of ML components and capabilities. It's designed to reduce effort, lower costs, and get ML models into production as quickly as possible.

#### **Step 3: Deploy models**

Once the models are trained, they can be operationalized in VantageCloud. API integration with Azure ML offers direct, transparent, real-time access to its models. Deploying these models to conduct live data scoring in VantageCloud delivers the crucial insights needed to drive business outcomes.

# Unlocking possibilities across industries

Enterprises across all industries are investing in AI/ML for a variety of use cases, including:

- Fraud prevention
- Churn reduction
- Supply chain optimization
- Telemetry analytics
- Catastrophic infrastructure failure prevention

With VantageCloud and Azure ML, organizations can accelerate AI/ML projects to deliver data-driven insights that power real-world business outcomes.



# Unlocking insights makes more possible in Manufacturing

#### Enable predictive maintenance and more uptime

Manufacturers can preempt the failure of vital machinery or components using advanced analytic algorithms on telemetry data, reducing downtime and maintenance, lengthening service life, and improving inventory planning.

### Improve predictive quality and yield

Al and ML help manufacturers identify the root cause of process-based losses related to factors like quality, yield, and energy efficiency, thereby protecting their bottom lines.



# Unlocking insights makes more possible in **Financial Services**

#### Improve credit risk prediction

Borrowers that don't make their payments are a top source of risk for lending institutions. To maximize risk-adjusted returns and accelerate their deployment, Azure ML and VantageCloud help financial institutions build and deploy high-quality ML models that predict the likelihood of loan defaults.

#### **Enhanced customer onboarding**

Leverage early transactions and interactions to develop customer 360 profiles that enable customized experiences. VantageCloud and Azure ML accelerate the predictive analytics that help institutions increase revenue, reduce attrition, and maximize satisfaction.

# Unlocking insights makes more possible in Healthcare

#### Improve clinical decision making

Healthcare and life sciences organizations need to be able to quickly understand text in medical documents such as patient forms. Azure ML and VantageCloud help organizations to build and deploy ML models to automatically extract, process, and analyze data from handwritten and electronic documents more quickly and accurately.

#### **Strengthen fraud detection**

To keep patient data secure, it's critical that fraud detection models are able to spot suspicious healthcare claims before they impact customers. Azure ML and VantageCloud enable organizations to build ML models that detect suspicious transactions before they occur.



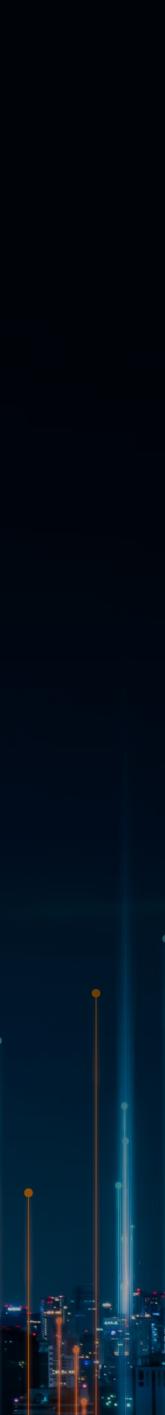
## Unlocking insights makes more possible in **Telecommunications**

#### **Increase Network Profitability**

A smart network roll-out and customer experience-based operations are powerful levers for profitability. VantageCloud and Azure ML equip operators with the ability to consider multiple factors, such as granular cost details, service quality, and legacy equipment decommissions, among others.

#### **Guide Customer Journeys**

Customers expect seamless and consistent always-on experiences across touchpoints. VantageCloud and Azure ML provide insight into individual customer journeys, enabling companies to proactively steer each customer to faster service resolution, an improved usage experience, and successful sales.



# Scale Your Analytics, Al, and ML **Initiatives Faster with Teradata** and Microsoft

### Schedule a demo

Email microsoft@teradata.com to schedule a VantageCloud and Azure ML demo with a Teradata team member.

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