


Escape AI Inertia and Deliver Transformational Innovation With Teradata and Microsoft

3 steps to operationalize and drive value with AI



teradata.



Microsoft
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Introduction

Generative artificial intelligence (AI) offers almost boundless opportunities for innovation, and if your organization is like most, it's eager to capitalize on the \$26.5 trillion in total economic potential.¹ In a recent **survey** conducted by Forbes on behalf of Teradata, 1,001 executive leaders predicted that AI had the potential to revolutionize everything from the customer experience to supply chains to risk management and internal processes.

Sixty-nine percent of those leaders expect that data analytics initiatives will be mostly or fully supported by AI and machine learning (ML) in three years' time. Yet if you're one of the engineers tasked with turning this lofty goal into reality, you know that many barriers lay ahead. Siloed data, limited computing resources, and unpredictable costs are just a few of the obstacles that thwart the large-scale adoption of AI programs and keep initiatives mired in the proof-of-concept (POC) stage. Whether you're a developer, data scientist, or application builder, you deserve the tools to work more efficiently and drive results faster.

So, how can you unleash the radical AI innovation that transforms organizations into enterprises of the future? Learn the three steps that enable you to explore, experiment, and operationalize AI projects at any scale by leveraging a secure and seamlessly integrated ecosystem—with Teradata AI Unlimited via Microsoft Fabric.

3 steps to operationalize and drive value with AI

01

Work in the cloud for maximum collaboration and experimentation

02

Harmonize data to power innovation

03

Use powerful tools that enable you to scale up cost-efficiently and deliver real value quickly

Work in the cloud for maximum collaboration and experimentation

True innovation needs powerful capabilities that let you follow your imagination without constraints. With a serverless AI/ML engine in the cloud enabled with high-performance compute and in-engine analytics, you can explore use cases that require intensive AI workloads, integrated custom or public large language models (LLMs), and a range of data and AI tools for a frictionless, serverless user experience delivered by AI Unlimited in the cloud.

AI Unlimited serves as an on-demand self-service platform and compute layer via Fabric, offering a versatile suite of analytical functions covering every element in the development life cycle from data movement to data science, real-time analytics, and business intelligence - including data lake, data engineering, and data integration. With AI Unlimited, you gain all the capabilities of the Teradata Analytics Database parallel scalable engine, enabling you to execute unlimited functions and structured query language (SQL) processing on your data, for a frictionless, serverless user experience in the cloud.

Bring the power of Teradata's industry-leading ClearScape Analytics™ capabilities to a low-cost environment that maximizes exploration and discovery. Experience the power of choice to experiment with AI Unlimited via Microsoft Fabric, delivering in-engine analytics functions for massively parallel processing, the ability to build

and run models, and operationalization at scale. You can build applications with embedded AI/ML and deliver domain-specific applications like anomaly detection, customer churn, and next best offer.

For example, a **video** shared recently at Microsoft Ignite explores how telecommunications companies can analyze data to determine where to place new micro-stations for enhanced 5G coverage. You can simply spin up AI Unlimited via Fabric, explore data in Microsoft OneLake, and analyze it using SQL and ML functions within AI Unlimited. Microsoft Copilot within Fabric provides support in finding the right queries, functions, or datasets to use. With real-time visualization of the results within Microsoft Power BI, you can start recommending optimal locations for the micro-stations and transition the model into production within Fabric.

AI Unlimited via Fabric maximizes the impact of your ideas. You can explore, experiment, and operationalize new use cases for AI initiatives without risk or restraint with a serverless AI engine in the cloud.

Harmonize data to power innovation

A harmonized dataset is an essential ingredient to creating AI with impact. Modern organizations are collecting data at a rapid rate of growth. Due to mergers, legacy technology, and a lack of formal governance, this data may reside in siloed systems with duplications, errors, and disparate frameworks. Harmonizing helps make this data AI-ready by breaking down silos and enabling insights to flow seamlessly—almost transparently—between systems, allowing you to easily access the answers you need.

With layered tech stacks, complex organizational structures, and unmanaged data proliferation, it's no wonder only 11% of leaders strongly agree their organizations have fully integrated, harmonized, and visualized data across the enterprise.²

Enterprises already spend millions of dollars moving and replicating data across their various pipelines and silos on legacy systems. As a result, the majority of all AI/ML project time is spent preparing data instead of creating value. With AI Unlimited via Fabric, you can skip the onerous data cleanup process and start accessing data faster in OneLake, an integrated store that supports open table formats.

With AI Unlimited, you get a serverless user environment that's installed and provisioned in minutes within Fabric. Explore data where it lives in OneLake and avoid the time, complexity, and cost of moving data, managing data infrastructure, or waiting on information technology (IT) teams.

When you run AI Unlimited via Fabric, you get high-performance computing and advanced in-engine analytics that allow you to execute sophisticated AI workloads. Simply open Fabric, launch AI Unlimited, and access all shared storage in OneLake in minutes for cost-effective compute, on demand, at any scale. This end-to-end analytics platform unifies the data and analytics tools from the data lake to the business user, giving you seamless access to OneLake via Delta Lake open table format (OTF).

The underlying data in Delta Lake format serves as the storage mechanism, facilitating the passage of output between different technologies. This enables you to perform feature engineering in Spark, push results back to OneLake, and even incorporate reporting in the execution pipeline. Fabric unifies process interactions, providing a singular user interface (UI) experience, and streamlines security configuration across different engines.

11%

of leaders strongly agree their organizations have fully integrated, harmonized, and visualized data across the enterprise.²

Use powerful tools that enable you to scale up cost-efficiently and deliver real value quickly

The ultimate step in breaking through POC inertia is scaling your ideas across the enterprise to drive real value. You can purchase AI Unlimited via a self-service, on-demand experience through Fabric and Azure Marketplace, and the number of resources you can deploy is scalable.

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AI Unlimited via Fabric offers robust tools to power new AI and analytics use cases, from data exploration and feature engineering to model training and inferencing. At any time, you can smoothly transition and operationalize a prototype to a Teradata VantageCloud Lake on Azure production environment.

Pay only for what you need through a consumption model based on the actual time you spend using this offering, allowing you to make discoveries without worrying about costly overruns and time-consuming provisioning. With AI Unlimited via Fabric, you can focus on creativity, not logistics, and successfully scale your ideas into action.

Sources:

1. "The economic potential of generative AI: The next productivity frontier," McKinsey, 2023, <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier>.
2. "Enterprise 2030: Building the AI-powered company of the future," Forbes Insights, 2023, <https://www.teradata.com/resources/analyst-reports/building-the-ai-powered-company-of-the-future>.



Accelerate value from AI opportunities with Teradata AI Unlimited via Microsoft Fabric

Get the tools to move your ideas from experimentation into production. With Teradata AI Unlimited via Microsoft Fabric, you can explore and implement AI innovations without boundaries.

Explore the power of limitless AI innovation.

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