

Harnessing the Possibilities of Generative AI

How enterprises can drive breakthrough innovation with the latest AI technologies

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Generative AI tools like ChatGPT have made AI mainstream. Now organizations everywhere want to understand the potential of gen AI and what it means for their business. Enterprises expect big things from gen AI, hoping it will help drive faster innovation, improve business performance, and enrich customer experiences. But those big expectations come with even bigger challenges.

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Tech and business leaders see big potential in gen AI

Generative AI requires exponential volumes of data from a wide variety of sources. And all of it needs to be harmonized, integrated, governed, managed, and included in analyses for the best results. Teradata recently partnered with IDC to survey 900 CIOs, CDOs, and CFOs. In this ebook we share the findings and provide concrete examples of how gen AI can drive real-world results for enterprises. We also examine the technology required to get the most value, performance and growth from gen AI projects.

IDC research shows

80%

believe they'll
use gen AI in
future products
and offerings

2 in 3

expect significant
pressure to take
advantage of gen
AI in the next 6 to
12 months



Driving real-world results with generative AI

Generative AI refers to a class of artificial intelligence algorithms designed to generate new context, such as images, text, music and even videos. One of the most popular applications of generative AI is the use of large language models (LLMs) for text generation.

Exploring uses of gen AI



Deploying a new generation of Customer 360 analytics

Generative AI can help businesses process, interpret, and understand text data better than ever before. For example, converting unstructured data like customer reviews and support tickets into relational metadata to help understand customer intent. Combining that relational metadata with transaction and interaction data from multiple touchpoints enables next generation “voice of the customer”, customer 360 analytics and truly customer-centric applications.



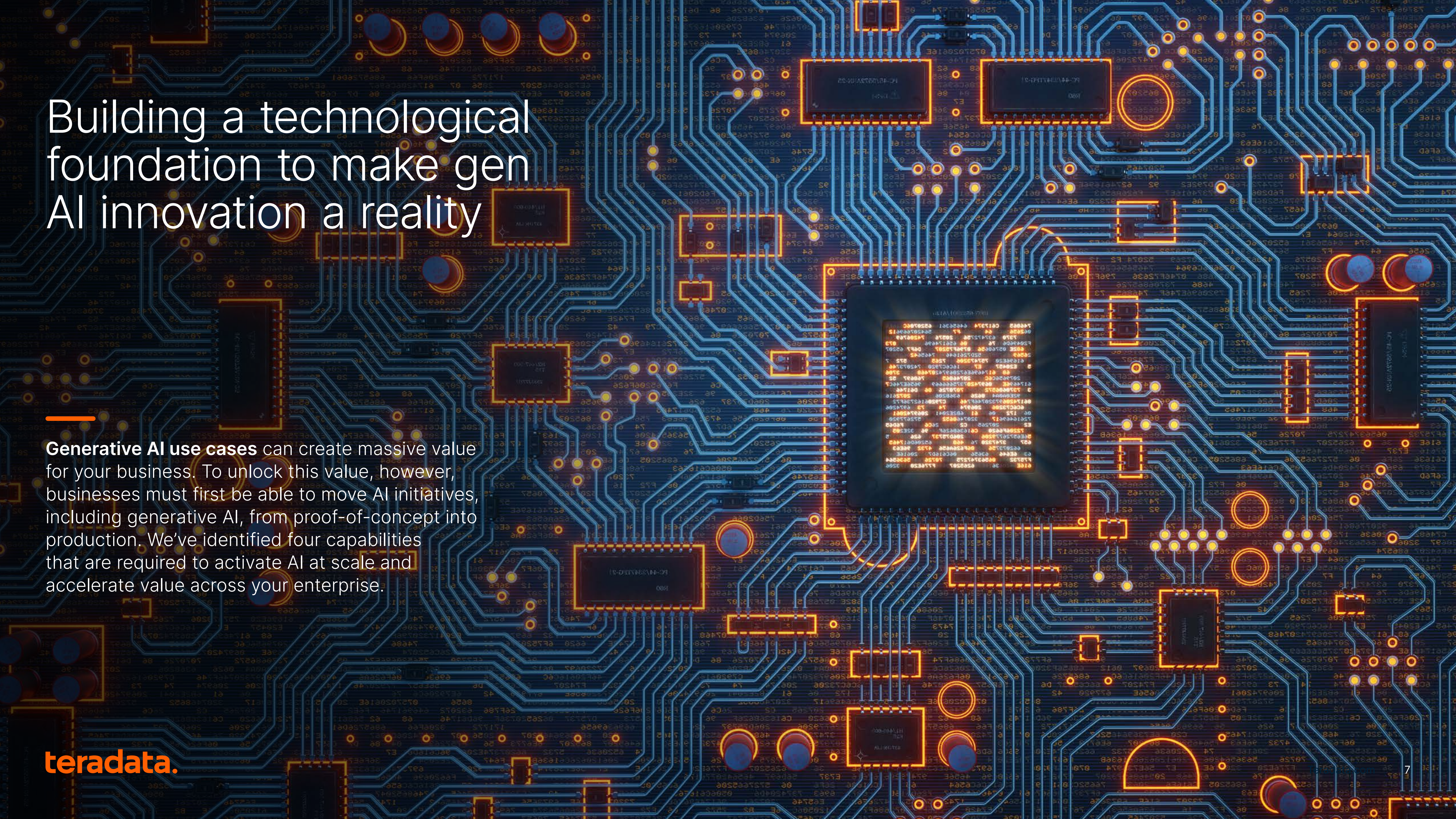
Driving greater productivity and insights with natural language interfaces

Generative AI has the potential to drastically improve employee productivity. Automating the manual processes of creating queries and scripts frees a data scientist to produce richer, more indepth schemas for customer transactions. When paired with a natural language tool, gen AI improves access for non-technical employees to insights and data for better decisions. For example, a call center employee for an insurance company could ask a gen AI tool to search transcripts for information on past customer interactions and claims.



Enriching customer experiences and improving sales with LLMs

Teradata recently partnered with a retailer to deploy smart carts that could scan items inside the cart and then provide relevant recommendations for additional items. Most recommendations engines make static suggestions based on product affinity. However, this retailer uses a large language model to understand the shopper’s intent to make highly relevant suggestions. The result of this context based recommendation engine? A richer customer experience, deeper engagement, and more profitable growth.



Building a technological foundation to make gen AI innovation a reality

Generative AI use cases can create massive value for your business. To unlock this value, however, businesses must first be able to move AI initiatives, including generative AI, from proof-of-concept into production. We've identified four capabilities that are required to activate AI at scale and accelerate value across your enterprise.

The hidden costs of AI development

80%

project time spent
preparing data,
not creating value

65%

Predictive models
that never make it
to production

5

month average
amount of time it
takes to deploy
models

Four Essential Capabilities

1

Data management

Generative AI requires good quality data, and lots of it. But most companies spend 80% of all project time preparing data, not creating value. Many also spend millions of dollars on multiple systems that move and replicate data while managing multiple pipelines and silos on legacy systems. The result: an expensive and unsustainable data and compute sprawl. To drive AI innovation, it's crucial to look at solutions that have powerful data management built into the platform.

2

Flexible tools and integrations

True innovation takes an ecosystem of supportive, synergistic technology. Empower your data scientists and business users alike with a platform that provides the flexibility they need to use the tools they want, in the way they want, to help support more AI use cases. Look for a platform that allows you to seamlessly integrate fast-evolving apps and easily operationalize externally trained LLMs at all levels of the enterprise.

3

End-to-end AI optimization

Deploying AI projects at scale is a common challenge. It takes five months on average to deploy models, and 65% of predictive models never making it to production. Look for a data and analytics platform that can accelerate data preparation, scale without fear of cost-overrun, and seamlessly operationalize AI models. This enables you to drive faster and more cost-effective AI innovation, solve your most complex challenges and accelerate time-to-value throughout your organization.

4

Optimal price performance

As enterprises deploy AI, they need to manage exponentially more models and queries, which can massively increase costs. To avoid a sky-high surprise bill, it's not enough to just optimize for storage costs. You need an analytics and data platform that can cost-effectively manage complex and high-volume workloads and queries.

Trusted AI Principles



People

A human-centered approach to AI improves compliance with safety and privacy rules, ethical and responsible standards as well as enhancing environmental sustainability. VantageCloud provides reliable and effective data security, protects personally identifiable information (PII), prevents inadvertent bias from model drift and limits potentially harmful impacts on our environment and society.



Transparency

Transparency is being able to understand how and why an AI driven decision was made. VantageCloud delivers visibility into the data behind decisions, including how models use data and comply with regulations. We enable validation that data is trustworthy before any AI is implemented and provide explainable and accountable reasoning behind model outputs when it is. Transparency powers flexible and fast innovation through open AI ecosystems.



Value Creation

Performance is vital to generate value from AI. Improved reliability, speed and accuracy will ensure that the ROI of AI models far outweighs the cost of experimentation. API integration with a wider range of tools offers direct, transparent, real-time access to models that can be quickly operationalized at scale in VantageCloud. Deploying models for live data scoring in VantageCloud delivers the crucial insights needed to drive business value at scale—all at a lower total cost of ownership.

Power your next AI breakthrough with Teradata and Microsoft

Enterprises today face major hurdles to use AI, especially gen AI, to drive innovation while delivering meaningful outcomes and measurable results. With Teradata VantageCloud Lake, available on Microsoft Azure, organizations can harness the full potential of generative AI by delivering harmonized data and trusted AI across every part of the business.

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Teradata and Microsoft working together

Market-leading expertise, scale, and technology



Deliver harmonized data

Our platforms ensure teams at every organizational level can leverage a modern and cost-effective cloud-native architecture that reigns in inefficiencies, such as data and compute sprawl.



Enrich customer experiences

We provide data science teams with powerful analytic capabilities and integrations that enable innovative AI/ML use cases, such as generative AI. Empowering complex analytics and AI on massive data sets to unlock new value.



Improve business performance

Embrace the full potential of AI investments with the fastest, most efficient cloud migrations that reduce risk and accelerate time-to-value for any part of the enterprise.

Together, Teradata ClearScape Analytics™ and Microsoft Azure Machine Learning (ML) simplify and accelerate the AI lifecycle through the most robust analytic capabilities for end-to-end analytic pipelines, including data prep, model training, and operationalizing at scale.

A man with glasses is looking upwards and to the right, holding a smartphone in his hands. He is wearing a dark jacket over a brown collared shirt. The background is a blurred city street with lights. On the left side of the image, there is a large orange circle containing text.

Drive AI Innovation across the enterprise

Generative AI is the new innovation catalyst and can create massive value for your business. Our platforms and partnerships ensure teams across your organization can execute complex analytics and AI/ML on massive data sets while incorporating their preferred data science tools, including Azure ML. This helps you unlock the full potential of your AI/ML investments as you deploy powerful, sophisticated models into production faster and with confidence.

Find out how to activate AI innovation in your enterprise today

To connect with one of our AI/ML experts or get a demo, visit our website.

About Teradata

At Teradata, we believe that people thrive when empowered with trusted information. That's why we built the most complete cloud analytics and data platform for AI. By delivering harmonized data, Trusted AI, and faster innovation, we uplift and empower our customers—and our customers' customers—to make better, more confident decisions. The world's top companies across every major industry trust Teradata to improve business performance, enrich customer experiences, and fully integrate data across the enterprise.

Learn more at [Teradata.com](https://www.teradata.com).

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