

Activating Enterprise Data with AI and Analytics

MAXIMIZING THE VALUE OF DATA WITH ADVANCED TECHNOLOGIES



Dan Vesset
Group Vice President,
Analytics and
Information Management, IDC



David Schubmehl
Research Vice President,
Conversational Artificial Intelligence and
Intelligent Knowledge Discovery, IDC

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In This InfoBrief

Artificial intelligence (AI) and machine learning (ML) technologies are transforming business processes and work in general. Accelerated analysis and decision making increasingly require advanced methods of handling data as well as using ML to analyze, recommend, and predict actions needed for business decision makers.

This IDC InfoBrief is based on ongoing market research in AI, automation, data, and analytics technology demand and supply trends from sources such as:

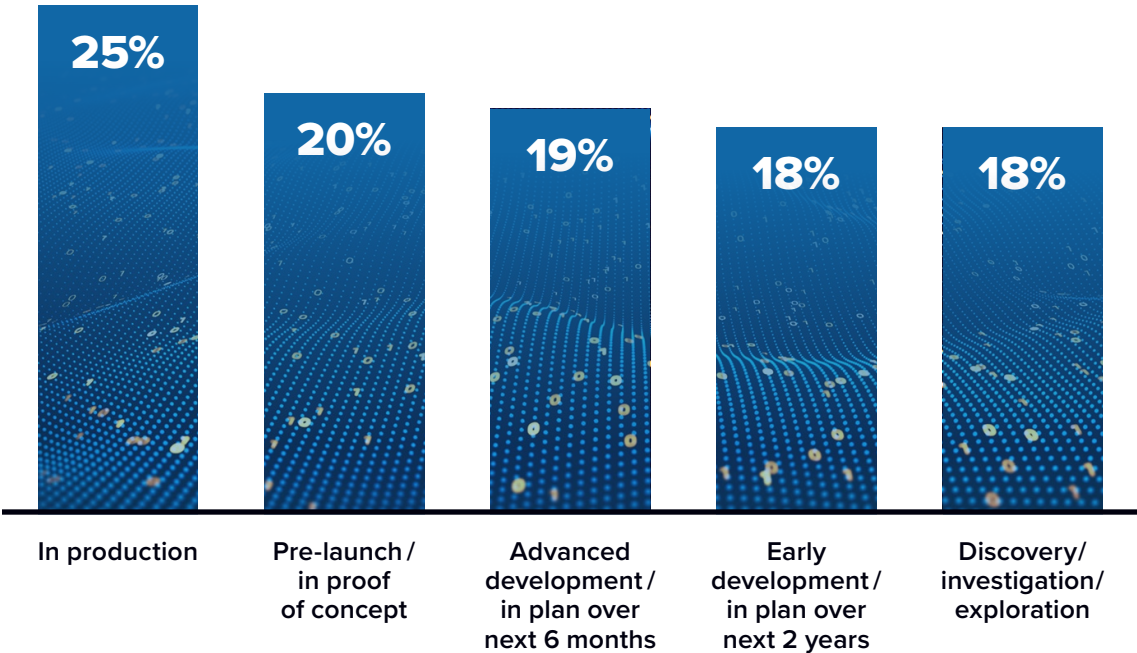
- ✓ IDC AI, data management, and analytics market forecasts
- ✓ Surveys of business and technology personas across industries and geographies
- ✓ In-depth interviews with business and technology personas
- ✓ Technology supplier briefings



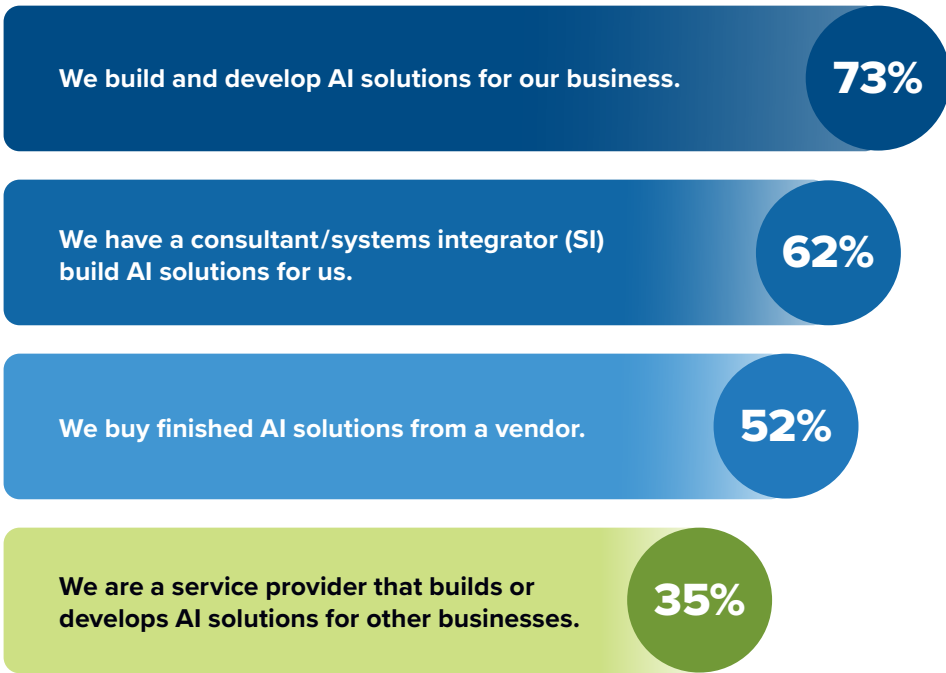
AI Is Maturing Rapidly and Is Seen as a Strategic Differentiator

Over **70%** of organizations adopting AI are building their own AI solutions.

Stages of AI Adoption



Organizational Approach of AI



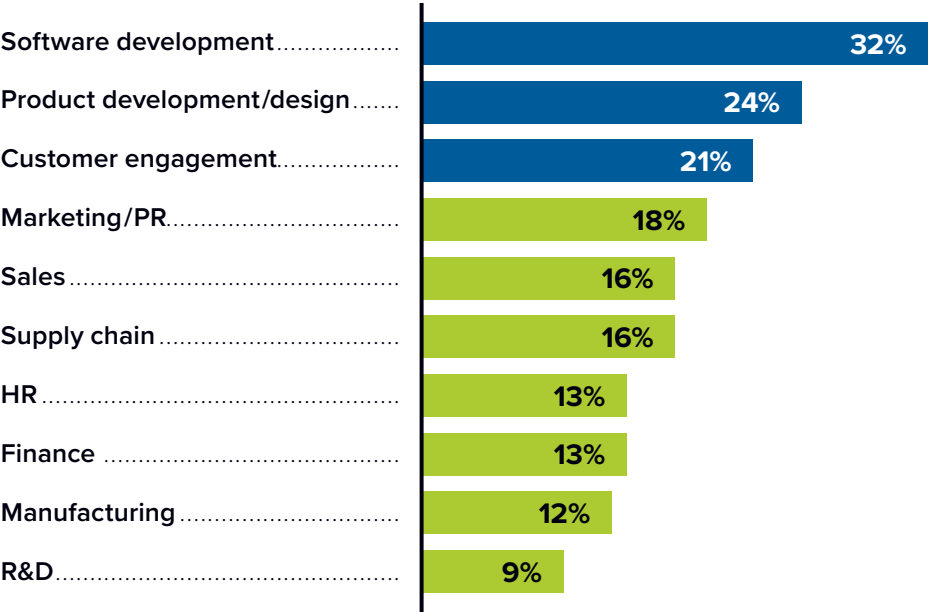
n = 2,053; Source: IDC's AI Strategies Buyerview, May 2022

Generative AI: Use Cases and Opportunities

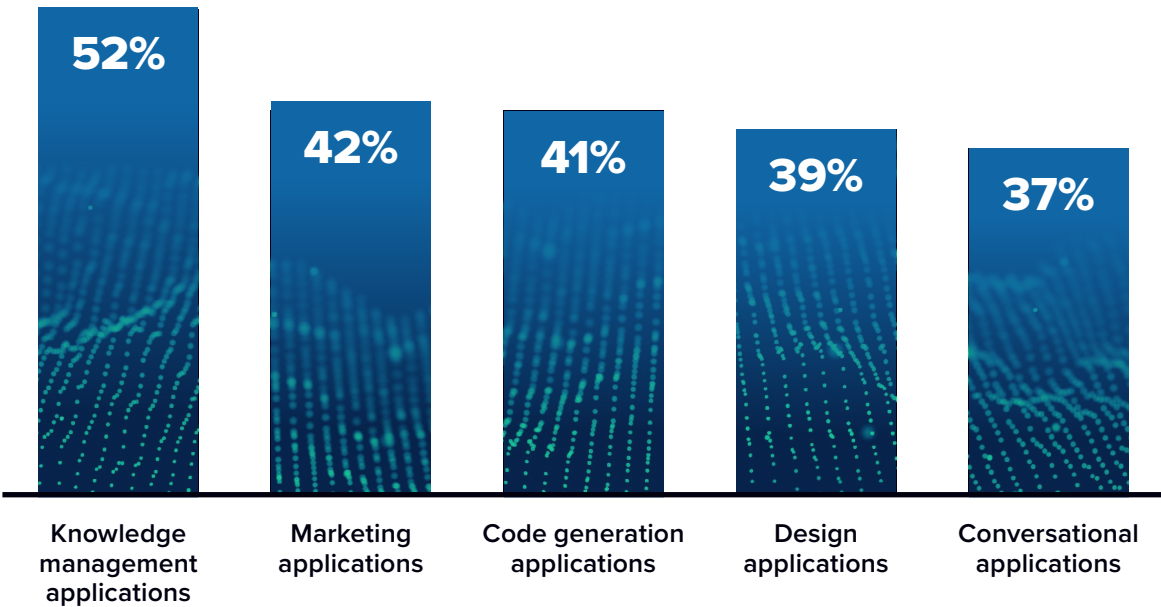
Generative AI (GenAI) is already having a significant impact on business processes and use cases. **Organizations are rapidly investing in GenAI**, hoping to get a jump on their competition and transform their businesses to create more value for their customers and improve ROI.

Generative AI Use Cases and Investments: Worldwide

In which two **business areas** do you think Generative AI could make the most impact in the next 18 months?



What Generative AI **use cases** do you anticipate having the most promise for your organization?



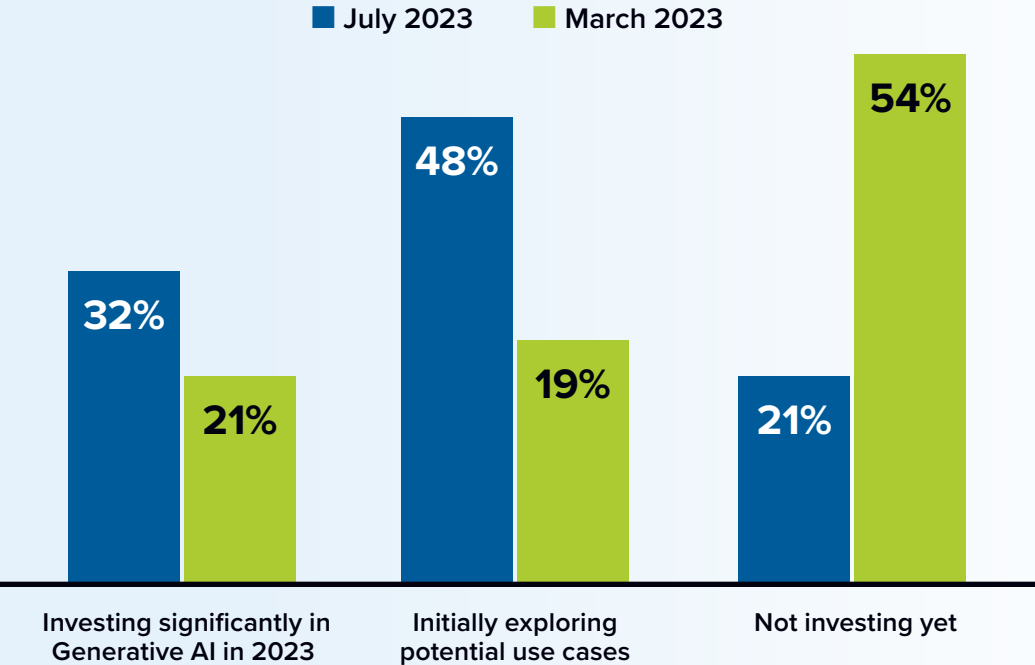
Note: Managed by IDC's Global Primary Research Group. Data weighted by IT Spend (500+ employee size). Use caution when interpreting small sample sizes. Multiple dichotomous table; total will not sum to 100%. n = 952; Source: IDC's *Future Enterprise Resiliency & Spending Survey Wave 2*, March 2023

AI Adoption Depends on Data

Combining Internal and External Data for AI Models

- ✓ **Organizations are quickly adopting AI and ML.**
A growing number are evaluating or significantly investing in GenAI.
- ✓ The challenge is to find and use the right types of data to build and operate effective AI models. Both structured and unstructured data are necessary. However, **most organizations continue to struggle with accessing the right data to build AI models.**
- ✓ **Of all the structured enterprise data created in 2022**, only 38% was analyzed, and even less (25%) was analyzed using AI and ML. **The use of unstructured data** (the text, images, and video that are the domain of GenAI) is even lower.

What's your organization's current approach to Generative AI?



n = 348, Base = North America; Source: IDC's *Future Enterprise Resiliency & Spending Survey*, Wave 6, July 2023 | For an accessible version of the data on this page, see [Supplemental Data](#) in the Appendix.

Challenges of Enterprise Data Activation

Most organizational leaders feel their company's data is underutilized.



The failure to embrace a unified enterprise intelligence strategy, its enabling architecture, and a platform that is scalable, secure, and uses open data, analytics, and AI standards leads to issues such as:

- ✓ **Data decay: 75%** of decision makers say that data loses its value within days.
- ✓ **Data waste: 33%** say they often don't get around to using data they receive.
- ✓ **Data disconnect: 61%** say data complexity has increased compared to last year.
- ✓ **Data neglect: 70%** say that data is being underutilized.

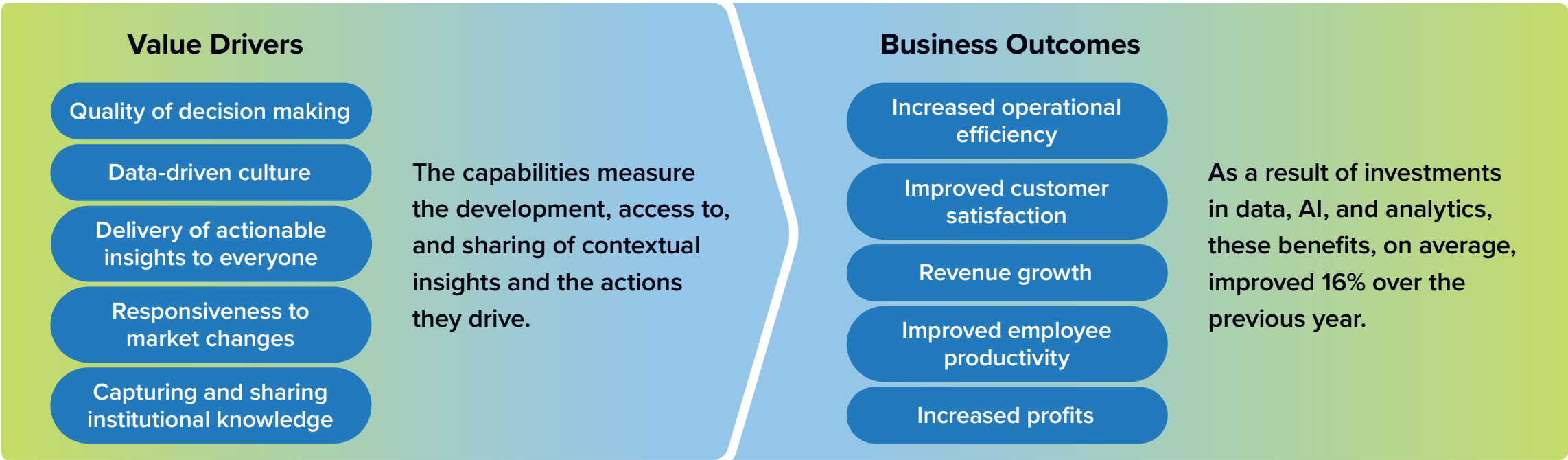
Source: IDC's Data Valuation Study, 2023

Business and Technology Benefits

Signs of the impact of and returns from AI and data initiatives have already emerged across industries.

Leading organizations are experiencing improvements in value drivers and business outcomes:

- ✓ **35%** improvement in innovation
- ✓ **33%** improvement in sustainability
- ✓ **32%** improvement in both customer and employee retention metrics



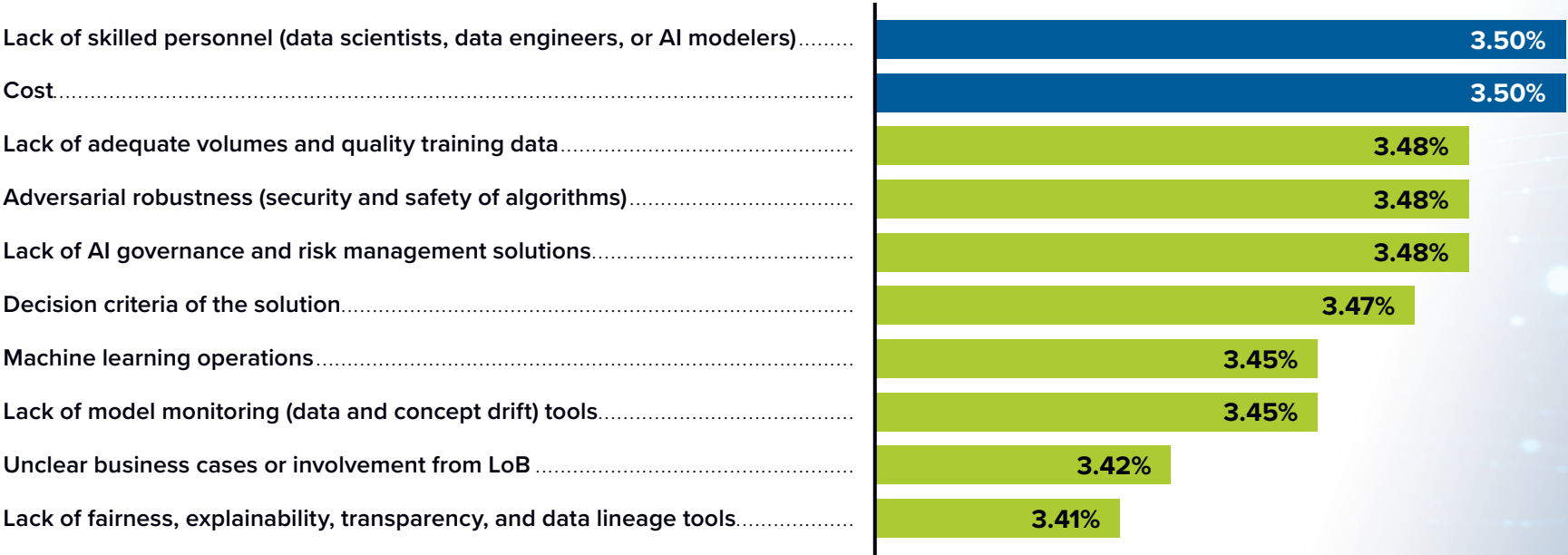
Challenges of Deriving Value From AI

To thrive in the era of AI, organizations must overcome challenges around the **implementation and deployment of AI/ML** within their business functions as well as handle all **enterprise data issues**.

Top Challenges in Implementing AI/ML Solutions

Rate how challenging these aspects are for implementing AI technology at your organization.

(On a scale of 1 = Least challenging to 5 = Most challenging)



n = 2,053; Source: IDC's AI Strategies Buyerview, May 2022

Essential Guidance/Key Takeaways



Develop an **enterprise intelligence strategy**.



Design an **enterprise intelligence architecture** encompassing a data lakehouse, data intelligence and integration, business intelligence, and AI capabilities.



Ensure the **availability of needed skills** either through hiring or outsourcing across the above technologies.



Identify **decision-making needs across different users and use cases** within the organization.



Identify opportunities for **decision augmentation and decision automation**.



Identify data needs for **developing and training AI models**.



Consider the need to **combine internal structured enterprise application data with unstructured and structured data** from external applications and services.

Appendix: Supplemental Data

The table in this appendix provides an accessible version of the data for the complex figure in this document. Click “Return to original figure” below this table to get back to the original data figure.

SUPPLEMENTAL DATA FROM PAGE 6

What’s your organization’s current approach to Generative AI?

	June 2023	February 2023
Investing significantly in Generative AI in 2023	32%	21%
Initially exploring potential use cases	48%	25%
Not investing yet	21%	54%

n = 348, Base = North America; Source: IDC’s Future Enterprise Resiliency & Spending Survey, Wave 6, July 2023]

[Return to original figure](#)

About the IDC Analysts



Dan Vesset
Group Vice President,
Analytics and Information Management, IDC

Dan Vesset is Group Vice President of IDC’s Analytics and Information Management market research and advisory practice where he leads a group of analysts covering all aspects of structured data and unstructured content processing, integration, management, governance, analysis, visualization, and monetization. Dan also leads IDC’s global Big Data and Analytics research pillar.

[More about Dan Vesset](#)



Dave Schubmehl
Research Vice President,
Conversational Artificial Intelligence and
Intelligent Knowledge Discovery, IDC

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[More about Dave Schubmehl](#)

Message from the Sponsor



Extracting the full value of data for modern analytics and AI use cases is challenging. We believe that companies need a data platform that helps them unlock the value of their data no matter where it lives, with centralized governance and seamless access to easy-to-use AI development tools, frameworks, and open-source large language models (LLMs). We believe that such a data platform must be:

- ▶ **Open** Customers need integration with open source standards, LLMs, and APIs to ensure data portability and extensibility.
- ▶ **Unified** Firms need to manage and govern their data while maintaining its context and currency. [Learn about BigQuery.](#)
- ▶ **Intelligent** Customers need a GenAI toolset to build AI-powered apps with customized LLMs. [Learn about Vertex AI.](#)
- ▶ **Easy** The platform should speed the customer's time to value with outcome- focused accelerators. [See Google Cloud Cortex Framework.](#)
- ▶ **Secure** The platform should be built for security with a shared-fate model, and never use customer data in its models.

Learn more about Google Cloud's enterprise data analytics and AI solutions.

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IDC Research, Inc.
140 Kendrick Street, Building B, Needham, MA 02494, USA
T +1 508 872 8200

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