



Table of Contents

- 3 About FutureScape Predictions
- 4 Generative AI Predictions Overview
- **5** Generative Al Predictions
- 10 Conclusion/More FutureScape Content
- 11 About IDC

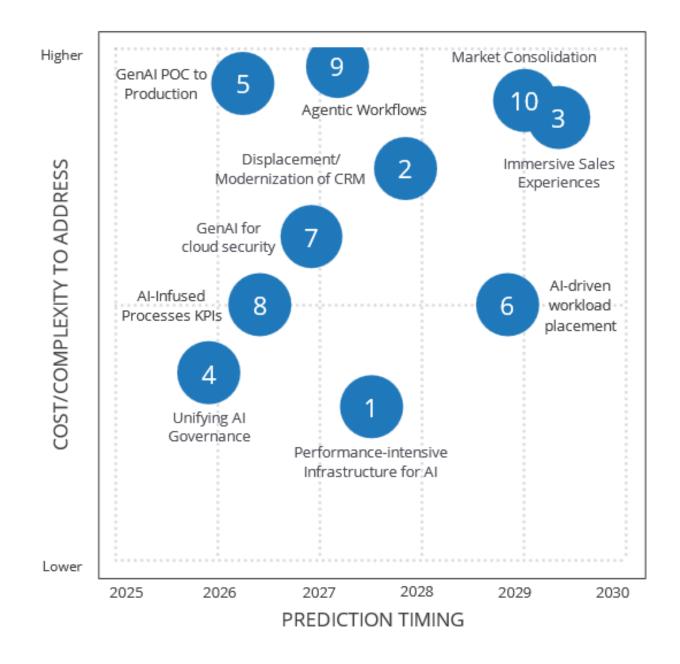


IDC FutureScape reports are used to shape enterprise IT strategy and planning by providing a basic framework for evaluating IT initiatives in terms of their value to business strategy now and in the foreseeable future.

IDC's FutureScape are comprised of a set of predictions designed to identify a range of pending issues that CIOs and senior technology professionals will confront within the typical five-year business planning cycle. Each prediction is assessed on the basis of its complexity, organizational impact, and time frame to expected mainstream adoption.



IDC FutureScape Worldwide Generative AI 2025 Predictions



Note: Marker number refers only to the order the prediction appears in the document and does not indicate rank or importance, unless otherwise noted in the Executive Summary.

Source: IDC, 2024

More Than a Passing Fad

According to <u>IDC's Worldwide AI and Generative AI Spending Guide Taxonomy</u>, 2024, enterprises worldwide are expected to invest \$307 billion on AI solutions in 2025. This spending is expected to grow to \$632 billion at a compound annual growth rate (CAGR) of 29.0% for 2024–2028.

As per the same, enterprises worldwide are expected to invest \$69.1 billion on generative AI (GenAI) solutions in 2025. GenAI spending is expected to exceed \$202 billion in 2028.

In this IDC FutureScape, the global team of IDC analysts describes key drivers affecting IT and business decision- makers responsible for this spending and the effective use of associated solutions. This IDC FutureScape also presents the top 10 predictions affecting GenAl initiatives through 2030.

Each prediction is assessed based on its impact (a mix of cost and complexity to address) and time frame to the expected stated adoption level. This document also offers IDC analysts' guidance to IT and business decision- makers as they develop or revise their strategies and create resource allocation plans for investment in Al and automation.



PREDICTION 1

60%

By 2027, 60% of G2000 Organizations Will Adopt
Performance-Intensive, Software-Driven, Scale-Out
Storage Infrastructure and Unified Data Management to
Accelerate Insights for AI and Analytics

IT Impact

- IT organizations skilled in operating traditional SAN and NAS systems may require additional training to provision, tune, and manage scale-out, software-defined storage (SDS) systems with massive data sets.
- Al and analytics workloads generally require flash storage to meet performance requirements, which costs more on a price-per-gigabyte basis than HDDs.
- Energy consumption is a key consideration for storage systems with data-intensive Al and analytics workloads.

Guidance

- Before evaluating scale-out SDS products, organizations should assess the IOPS, latency, throughput, and capacity growth of their AI and analytics workloads.
- Organizations should ensure the SDS vendor has a clear strategy to unify data access and management across onpremises and cloud environments.
- Organizations should verify the vendor's support for storage and memory technologies, including NVMe SSDs, QLC/TLC NAND flash, and storage-class memory (SCM).

PREDICTION 2

63%

By 2027, 63% of G2000 Companies Will Reduce CRM Spending, Opting for More Advanced Data Tools (CDPs, Data Lakes), Diverse Sources (Third-Party Signals, ID Resolution), and Al-Powered Interfaces

IT Impact

- IT teams will need to support more complex data ecosystems, integrating CDPs, data lakes, and Al tools, which require scalable cloud infrastructure and realtime data processing capabilities. This is significantly more complex than traditional CRM tools.
- Managing diverse data sources, especially zero- and third-party data, will increase the need for robust data governance, privacy compliance, and security measures.

- Ensure cross-functional alignment across CX teams (sales, service, marketing, etc.) and IT teams on the data strategy. As data sources become more diverse and integrated, determine how data tools will be leveraged, governed, and owned.
- Organizations should demand more from vendors or find new ones that support their needs, ensuring no re-keying of information, automatic action tracking, and easy access to customized insights.



PREDICTION 3

52%

By 2029, Al-Driven Automation Will Empower 52% of G2000 Companies to Adopt Immersive Technologies to Reimagine Customer Engagement and Foster Deeper Connections

IT Impact

- New immersive technologies will need to be carefully integrated with the current platforms to ensure a unified customer experience, addressing issues like workflow, governance, nomenclature.
- IT should invest proactively to ensure their own ability to facilitate staff proficiency and successful implementation.
- Immersive technologies introduce unique security challenges. Updated security and privacy policies will be essential to address these new forms of interaction.

Guidance

- Launch pilot projects early to test and refine these new tools before competitive pressures necessitate full deployment. Use these trials to gather customer and rep feedback, identify challenges, and adjust strategies for a smooth transition.
- Invest in comprehensive training for sales and other frontline staff to master immersive technologies. This will involve fundamental reskilling to adapt to new customer interaction methods.

PREDICTION 4

85%

By 2025, 85% of Organizations Will Be Formalizing Policies and Oversight to Address Al Risks (e.g., Ethical, Brand, PII), Aligning Al Governance with Strategic Business Goals

IT Impact

- The push for rapid Al adoption and leverage of Al capabilities can lead to shortcuts in governance.
- Legacy systems and outdated data sources can create "black box" scenarios, making it difficult to identify and address potential biases.
- Data teams will face increased pressure to ensure transparent data profiling, track performance, and maintain accountability for data sources and collection methods.
- The need for AI governance will require upskilling existing IT staff or hiring new talent.

- Develop a governance structure that aligns AI model design and deployment with corporate values and regulations.
- Implement risk management protocols emphasizing ethical Al design, bias testing, and accountability.
- Reduce bias by prioritizing data governance protocols that ensure transparency in data sources, profiling, and performance tracking.
- Collaborate with legal, compliance, and risk teams to ensure AI meets legal and ethical standards.



PREDICTION 5

33%

In 2026, Over One-Third of Organizations Will Be Stuck in the Experimental, Point Solution Phase of Al Experimentation, Requiring a Shift of Focus to Enterprise Use Cases to Deliver ROI

IT Impact

- Organizations stuck in the experimentation phase may face delayed ROI on AI initiatives as they struggle to transition from POC to full production.
- Scaling Al solutions will require seamless integration with existing IT infrastructure, legacy systems, and data architectures, which may present technical challenges and increase complexity.
- The transition to enterprise Al will increase the demand for highly specialized talent and could create a potential skills gap.

Guidance

- Promote responsible Al use at scale by implementing robust Al governance frameworks.
- Establish an Al center of excellence to centralize expertise, share best practices, and coordinate cross-functional teams.
- Develop a targeted talent acquisition strategy to attract top AI specialists while upskilling existing IT staff.
- Foster strong collaboration between IT and LOB teams to align AI initiatives with enterprise goals and ensure that operational use cases drive meaningful ROI.

PREDICTION 6

45%

By 2028, 45% of Organizations Will Use Al-Powered Tools to Move 60% of Enterprise Workloads to Most Optimal Environments

IT Impact

- Al-driven workload movement will be yet another Al use case requiring some changes in organization's mindset and processes.
- Integration of greater
 automation and intelligence to
 the workload movement
 process will help companies
 reach the goal of running
 workloads in optimal
 environments, thus, delivering
 the most optimal performance,
 scalability, and manageability
 characteristics while recognizing
 most saving on costs.

- Al-driven workload movement shouldn't be an organization's first use case. Instead, start with other Al projects to build the necessary structure and mindset.
- Before implementing Al-driven workload movements, organizations should first manage workloads across multiple environments to understand the benefits and challenges.
- Partnering with a trusted workload migration partner will reduce risks related to implementation of Al-driven workload movement.



PREDICTION 7

40%

By 2026, 40% of Multicloud Environments Will Leverage Generative AI to Streamline Security and Identity Access Management, Reducing Manual Efforts by 50%

IT Impact

- User behavior, verification, and access management can be optimized to detect and prevent unauthorized access and privilege escalation, reducing errors and breaches.
- Security teams can use natural language questions to understand identity environments, boosting efficiency.
- With the adoption of agnostic hybrid multicloud open standards, GenAl can provide streamlined training and documentation by user role.

Guidance

- Early adopters of GenAl in multicloud security will improve data security and transparency, building trust with customers through real-time monitoring and advanced threat detection.
- The distributed nature of multicloud identity security demands interdisciplinary approaches to pattern recognition and anomaly detection. Companies should establish an IAM GenAl center of excellence (CoE) delivering benefits such as efficient management without bottlenecks.

PREDICTION 8

60%

By Mid-2026, 60% of G2000 Will Have New KPIs to Align Al-Infused Processes and Employee's Workflows, Which Will Drive 45% Improvements in Overall Operational Efficiency and Employee Productivity

IT Impact

- Allow the AI- infused workflows to quickly change the use of current enterprise applications, so "turning AI on within the workflow" is essential for the business to reap the value.
- Measure the original KPIs and set in stone so the benefits can be calculated as they occurred and brought forward to the organization.
- Make sure the business understands the expected implications of the AI workflow and can see a difference with the employee in the loop and then if/when the process becomes autonomous.

- Train employees on Al-infused processes and their role in the new workflow.
- Record pre-Al KPIs, then track KPIs with employees involved and when the process becomes autonomous.
- Consider efficiency gains, but remember employees now have time for other non-Al tasks.
- Look at workflows that have more manual or multiple applications dependent upon the employee to manage. Appy Al-infused processes to these processes for more KPI improvements.



PREDICTION 9

20%

By 2026, 20% of Frustrated Knowledge Workers with No Development Experience Will Take Charge of Transforming How They Work by Building Their Own Agentic Workflows, Improving Cycle Times by 40%

IT Impact

- IT will likely be tapped as a shared service for skills enablement in prompt engineering and Python, as well as support.
- As part of overall GenAl enablement, user-created Al agents will need to be included for monitoring.
- Organizations that manage citizen developer programs are likely to extend their programs to support worker-created and managed AI agents and agentic workflows.

Guidance

- Given its value to knowledge
 workers, supporting GenAl use
 to automate tasks makes more
 sense than prohibiting it,
 especially with many employees
 working remotely. Business and
 IT should create a plan for safe
 employee enablement.
- Consider a platform that allows Al experimentation while ensuring governance. If unsure where to start, seek advice from service providers with existing platforms.
- Learning from citizen developer programs and hosting hackathons can help foster a community for Al innovation.

PREDICTION 10

80%

By 2028, 80% of Foundation Models Used by Enterprises Will Be from a Max of Three Providers as the FM Market Will Consolidate Due to Unsustainable Business Models

IT Impact

- The consolidation of the foundation model landscape will catalyze a transition away from a focus on foundation models towards the ecosystem of technologies that build on these models to create value. This ecosystem features applications that leverage foundation models such as GitHub Copilot and OpenAl's ChatGPT.
- Model selection processes will become simplified because developers and AI engineers will focus on a more curated set of models to use for generative AI development initiatives.

- Familiarize yourself with development frameworks like LangChain, Llama Index, and Spring AI, which enable digital solutions using foundation models.
- Enhance your organization's use of practices like MLOps and LLMOps to automate and optimize interactions between models.
- Focus on model adoption and their extensibility for unique use cases to drive optimized outcomes.



Conclusion: More Than a Passing Fad

The generative AI market is experiencing rapid shifts, much like the dotcom era, with fluctuating valuations and numerous start-ups that may not have sustainable business models.

As Ritu Jyoti, GVP/GM of AI and Data Research at IDC, notes, "GenAI's responsible widespread integration into existing businesses and practical applications across industries, from finance to retail, clearly establishes it to be more than a passing fad."

Despite market volatility, generative AI is proving to be a lasting force that will reshape industries and drive innovation across the global economy.

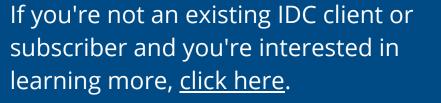
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Global Headquarters

140 Kendrick Street
Building B
Needham, MA 02494
USA
508.872.8200







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