



Finding the GenAI Path to ROI

IDC eBook



GenAI continues to take the market by storm. According to IDC's August 2023 Worldwide Artificial Intelligence Spending Guide, the AI market is already at \$166.5 billion, with a predicted growth rate of 26.9% CAGR for the next five years. Across all industries, based on IDC's June 2023 Future Enterprise Resiliency and Spending Survey Wave 5, 77% of respondents indicated they were either exploring or investing in GenAI. And, in some industries, such as media and entertainment, up to 93.6% of respondents are exploring or investing in GenAI.

Most businesses are considering GenAI as part of their ongoing strategy, looking at how to implement and capitalize on the technology-driven change. The large tech companies have jumped on the AI and GenAI bandwagons as they vie for control and influence in the GenAI space. In some cases, these businesses see success tied to owning – or at least shaping – the future of AI. IT and business leaders, however, are still struggling to understand how GenAI will ultimately deliver business value.

Looking Beyond Cost

When it comes to measuring that value – ROI – business leaders worry about cost. NVIDIA's workhorse chip that powers the GPUs for datacenters

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Source: Worldwide Artificial Intelligence Spending Guide, IDC, August 2023

and the AI industry costs approximately \$10,000. Monthly operational costs range between \$4 million and \$5 million, while model training costs can exceed \$5 million. In addition, there are costs associated with electricity and datacenter management. The reality, however, is that every disruptive technology has been expensive at launch. With broad adoption, however, economies of scale and increased competition put downward pressure on costs. We are already seeing that hybrid, next-generation neural networks and AI algorithms are becoming more efficient while new hybrid AI tools are facilitating more efficient processing of inferences and prompt response.

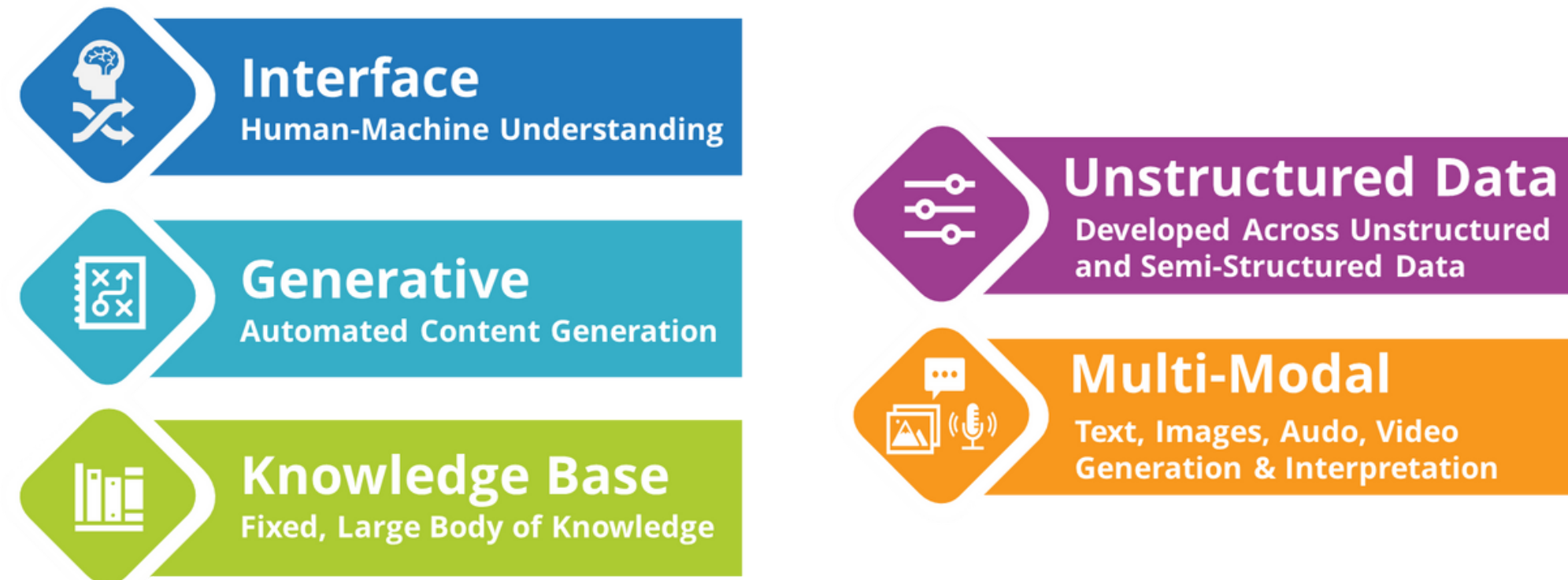
Aligning Use Cases with ROI Goals

GenAI has key characteristics that distinguish it from other AI and data solutions in the market. Executives must consider these unique characteristics to better align use cases with ROI goals:

- **Generative Technology** – Humans cannot consolidate all the relevant designs available in the enormous training sets for models. With GenAI, the result will always be more options, more accuracy, more clarity, and more data.
- **Knowledge Base** – The traditional approach to data – looking at the data first, and then trying to build clusters to form the right segmentations or examining anomalies between data sets – was insufficient. With GenAI, data analysts can first identify their strategic goals and then seek the right data that answers their questions. This line of thinking focuses on data priority.
- **Unstructured Data** – GenAI's ability to automate mapping of unstructured data improves productivity, speed, relevancy, and automation. It also reduces search and classification time, as well as storage space, as metadata is built into the vectors or tokens representing the data.
- **Multimodal** – GenAI reduces the cost of building creative content across multimodal generative work, offering automation and more effective scenario planning for business leaders.

The real value and ROI for GenAI in business will depend on how well GenAI drives business outcomes. Some outcomes take time to incubate, while others are instant. It's important to note that these outcomes can be either tangible – driving returns on specific KPIs – or intangible, where they are more difficult to measure in terms of KPI or earnings but add considerable value through network effects or other support. GenAI business outcomes are dependent on the strategy and direction of corporate leadership.

Characteristics of GenAI



Source: IDC, 2023

According to IDC, 77% of all data stored in 2023 will be unstructured ([IDC #US50397723, June 2023](#)). GenAI's ability to structure data will be invaluable – it can cluster, associate, and link unstructured data together to form categorization and specific classifications that might not even be known. GenAI will introduce high-value ROI opportunities by automating assignment of concepts — whether it's user-generated content (UGC) summaries, similar product items in a product catalog, or replacement options for a parts manufacturer.

Generative AI has already proven itself in several categories, such as marketing technologies, digital execution, and knowledge management. The most common applications for industries such as retail include applications in marketing distribution and automation of marketing content, contact center efficiencies, and product content generation.

Intangible returns, though not directly associated with margins, sales, profitability, or cost reduction, can have enormous and meaningful impact, especially across longer time frames. Intangible returns often manifest themselves in brand reinforcement, morale, customer satisfaction, and quality. Examples include:

- Amazon is applying GenAI to summarize product reviews. In 2022, consumers generated more than 1.5 billion Amazon reviews and ratings – a rate of 45 reviews per second. New GenAI-based capabilities improve the overall customer experience by enabling retail customers to select key criteria and personalizing search during the product evaluation process. The net result is a more efficient search that reduces customer engagement time and potentially improves conversion rates.
- Working with Google, The Mayo Clinic is leveraging a GenAI chatbot to build engagement for patient electronic health record (EHR) information. The tool enables a HIPAA-compliant environment to search and find the right pieces of information to assess patient health. Authorized doctors and caregivers gain simplified access to records to review patient histories and treatments and facilitate better responses in lifesaving conditions.

For generative AI, businesses approach evaluating ROI from three different perspectives:

- Technology solution assessment
- Portfolio program management
- Enterprise strategic management

Technology Solution Assessment

Many organizations will evaluate GenAI through a technology lens. Instead of examining business objectives and ROI goals, they will focus on less tangible returns tied to efficiency and employee productivity, while focusing on improving existing technology solutions that use non-AI or predictive AI solutions. In many cases, business and IT leaders will bundle GenAI with existing extensions and aspirational technology purchases. Examples of such initiatives might include:

- Purchasing a GenAI add-on to a merchandise replenishment tool to drive optimized supplier selection
- Including GenAI capabilities requirements in an RFP tender for a tech solution applied to supply chain software
- Requesting a feature for an integrated GenAI engagement function for an IVR that helps reduce employee engagement time and escalations
- Including GenAI programming copilot capabilities for developer teams to speed up quality control and code testing



In some cases, the organizations may rely on solution partners to develop the GenAI capabilities and build the ROI justification into custom work. In more advanced solutions, IT teams that drive procurement or business development will partner with organizations that might have potential GenAI solutions that apply to existing business use cases. New investments in GenAI will target and track existing solutions that can be bolt-on options to existing technology-focused use cases or already embedded.

Portfolio Program Management

With an emphasis on portfolio management, executives will quantitatively and qualitatively rank the value of various projects in a portfolio. While the decision to implement a program must focus on both the use case and the implementation, considering the following factors will help determine whether a project or program makes sense:

- Financial risk, including opportunity cost
- Operational risk, including PR, legal, and compliance risks
- Competitive risk
- Market trends and customer acceptance
- Business implementation feasibility
- Capital and operational expenses
- Talent resources
- Data and infrastructure resources
- Strategic fit
- Existing program/project overlap
- Time to market
- Legacy integration
- Profitability
- Long-term value
- Total cost of ownership
- Regulatory challenges

In many cases, executives look to explore, innovate, and experiment with GenAI through specific use cases and their applications within the portfolio. For more committed companies, businesses would extend these projects to entire programs. Businesses can use portfolio management to address specific use cases that the organization believes will have greater impact in operations or other facets of the business.

Enterprise Strategic Management

Businesses may look to leapfrog existing industry leaders, build on an enterprise-level initiative around GenAI, or develop in-house expertise to gain advantages in the future. There must be support and alignment from the C-Suite. The objective is to enable GenAI capabilities at multiple levels, with GenAI becoming an active differentiating factor. It also includes incorporating GenAI infrastructure through deep partnerships with experts in GenAI, hyperscalers, or third-party vendors that have already developed GenAI platforms for businesses.

Executives track strategic metrics tied to their corporate strategy resulting in key ROI drivers:

- Improving cost efficiency across multiple functional areas
- Reducing transport and in situ data storage and management costs
- Increasing productivity – overlapping or engaging portfolio management tools
- Aligning efforts with organizational goals
- Creating competitive advantage by modernizing an enterprise to include GenAI to drive ROI

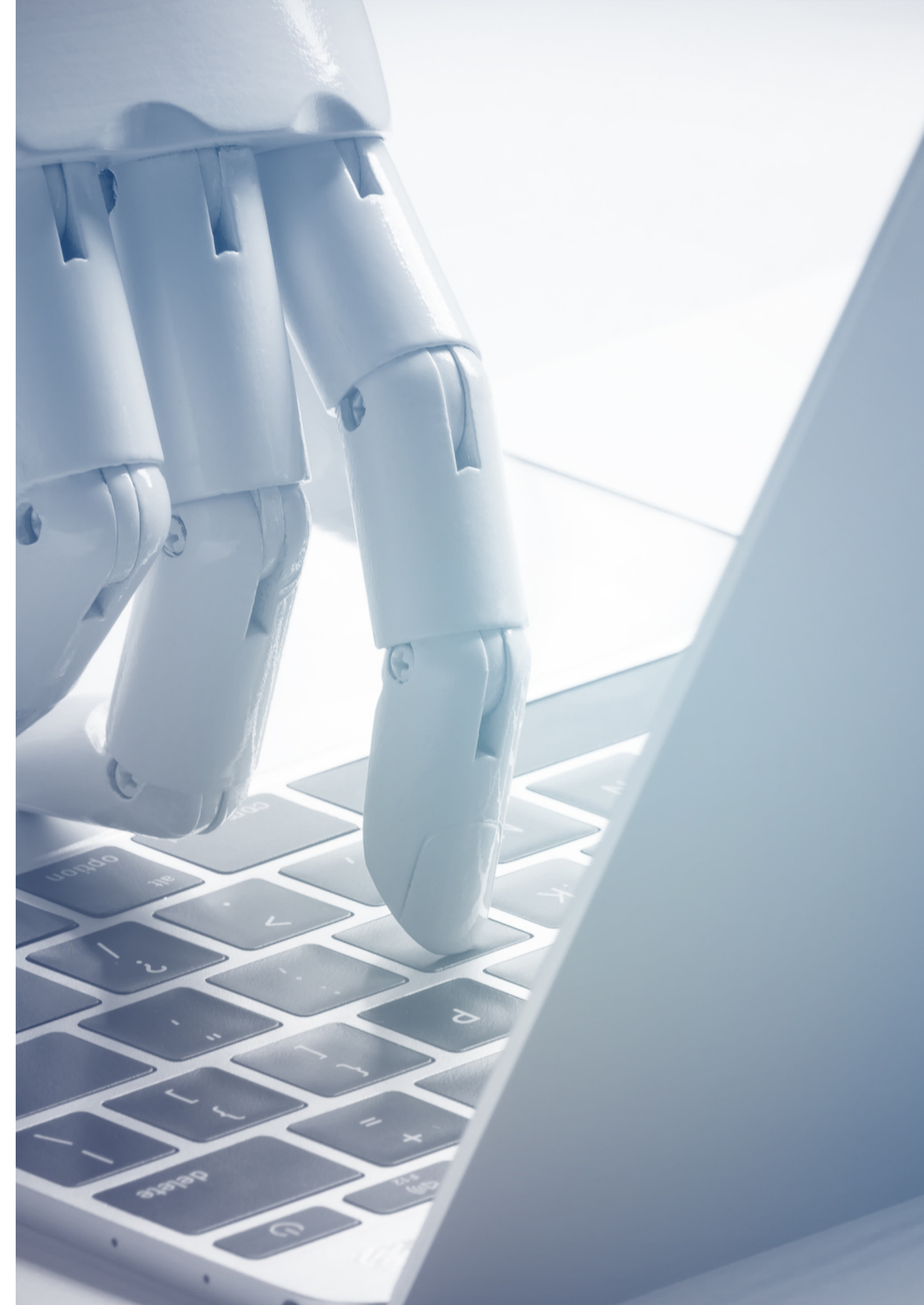
Establishing ROI for GenAI will remain a daunting task. Some obstacles arise from GenAI's generalized nature, others from flaws in the technology due to its novelty, where the technology will self-correct as it matures. None of these obstacles are deal-breakers, but they can make it difficult to establish ROI metrics.

KEY TAKEAWAYS FOR TECH BUYERS

There are several strategic moves you can take to ensure that your GenAI investments prove successful.

Identify the Appropriate Evaluation Method

Define the strategic decision-making structures you'll use to evaluate projects and returns prior to rolling out a GenAI solution – technology solution assessment, portfolio program management, or enterprise strategic management. Each method will allow you to highlight GenAI capabilities and the use cases related to your industry or focus. While other methods exist, most businesses will resort to one of these options or a variation based on their ongoing strategic plan.



Strive for Continual Improvement: In-House and with Partners

Once you have a viable mechanism to evaluate and assess GenAI options, including an overarching strategic development path, make sure not to put all your eggs into a single basket. The current GenAI market is volatile and nascent. It is imperative to invest internally – to build GenAI expertise – and externally to learn from and capitalize on best practices. Actionable steps include:

- Ensuring internal learning capabilities – new hires and partners should have genuine GenAI experience
- Capturing unique differentiators from third parties as they develop on your behalf
- Completing replacement of certain technologies might not be viable; assess the use cases and prioritize ROI generation
- Comparing technologies, including existing advanced analytics, predictive AI tech, and last month's GenAI capabilities
- Resisting the urge to augment the fundamental intelligence of the GenAI model. Let it get smarter on its own – each subsequent version of GenAI should improve ROI optimization capabilities
- Investing in in-house development, start-ups, partnerships, and third-party consulting relationships
- Iterating development with reassessment of ROI criteria at regular intervals, comparing metrics against benchmarks

Build and Support the Right Infrastructure, Metrics, and Benchmarks

Data is still the key for GenAI to function and realization of ROI is not complete without it. You'll need metrics to assess whether your business is truly improving or not as well as how far along the journey you have traveled. ROI will only be possible with the right infrastructure and data combinations. Smart executives tie performance to explicit KPIs. In addition to measuring your GenAI objectives and milestones, it will be important to set benchmarks, especially for identifying and comparing new GenAI use cases to past performance of a business unit or scenario.

IDC Helps Clients Navigate the GenAI Path to ROI

Converting GenAI's potential into use cases that generate business value requires a clear understanding of current limitations and challenges. IDC's leading-edge expertise and insight into GenAI trends, opportunities, requirements, and challenges help tech suppliers elevate conversations and better engage with tech buyer customers.

[Contact us today](#) to learn how IDC can help you succeed with GenAI.

Learn more about the full IDC report, [Achieving ROI with GenAI, Sep 2023, #US49316123](#).

