

Generative AI in Action:

Adoption Trends, Emerging Use Cases, and Tips for IT Leaders



Introduction: the dawn of generative AI

Every once in a while, we encounter a piece of technology that transforms society. Looking back throughout history, examples of this kind of paradigm-shifting transformation include industrialized manufacturing, television, personal computers and mobile devices, and cloud computing. Now, it's generative AI (GenAI), an advancement that is already transforming how we work and what we need to succeed.

Every new technology attracts early adopters. In some cases, small, nimble companies and individual contractors are leveraging generative AI-based tools for creative services or to get an edge. On the other hand, more established or regulated companies may be restricting tools like ChatGPT for workplace usage until issues around security, privacy, and data protection are addressed.

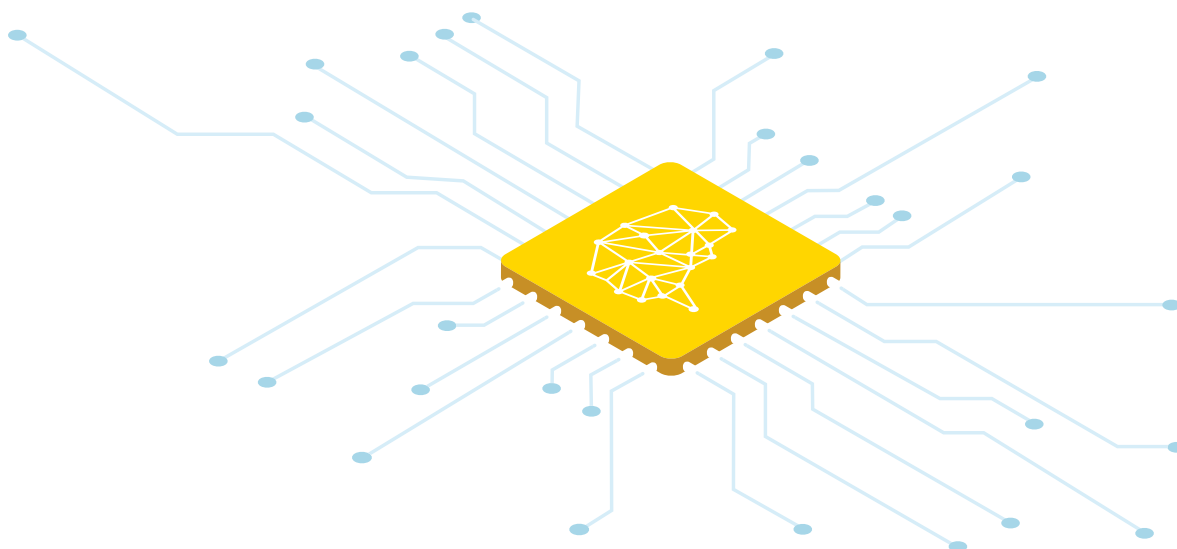
In a [KPMG US study](#) of U.S. executives in March 2023, almost two-thirds, 65%, of those surveyed believe “generative AI will have a high or extremely high impact on their organization in the next three to five years, far above every other emerging technology.” Yet nearly the same percentage, 60%, say they are still a year or two away from implementing their first generative AI solution.

As organizations develop plans for adopting GenAI into their operations or solutions, there are a couple of options for technology leaders to consider: Companies can leverage GenAI in software tools that they use or focus resources on developing GenAI solutions on their own. This is a decision that should be made with every organization's unique needs in mind. In the short term, it is much easier, faster — and less expensive — for organizations to leverage trusted tools with GenAI capabilities than to develop a generative AI solution from scratch.

In this guide, we'll explore use cases for generative AI:









- Across industries
- By job function
- For data and application integration

We'll also offer tips for proactive, secure adoption of generative AI tools, and explore SnapLogic's exciting, results-driving, generative AI enhancements for integration and automation.



GenAI use cases across industries

The adoption of generative AI-based tools will vary across industries. While certain AI-based tools such as a chatbot for customer service have seen adoption across the spectrum, generative AI solutions are likely to be adopted first by industries that need to be at the cutting edge of technology or have teams with severely limited resources. Examples include:

	Technology and software development	The tech industry is often at the forefront of AI adoption. Generative AI can be used for code generation, software testing, and automating various aspects of the software development lifecycle.
	Healthcare and life sciences	This sector can benefit from generative AI in areas like enhanced patient care during clinical trials, drug discovery, medical imaging analysis, genomics, and healthcare record summarization.
	Banking, financial services, and insurance	Financial institutions can use generative AI for tasks such as loan application processing, insurance quotes generation, synthetic data generation for fraud detection & risk assessment, investment advice, etc.
	Marketing and advertising	Marketing organizations leverage GenAI for content creation, advertising optimization, and customer segmentation, helping personalize marketing efforts.
	E-commerce and retail	These industries utilize AI for inventory management, optimal pricing, fraud elimination, and highly personalized recommendation systems to enhance the customer shopping experience.
	Manufacturing and industrial operations	Generative AI is used in manufacturing for process optimization, predictive maintenance, quality control, and product design.
	Legal services	Legal professionals can be more efficient and strategic and provide more value to clients by using AI for document review, contract analysis, legal research, and automated document generation.
	Education	In education, generative AI can help with personalized learning, content generation, and student support through chatbots and virtual teaching assistants.

It is important to note that not all companies in these sectors will adopt generative AI at the same pace. Factors such as the size of the organization, its technological readiness, and how well it is aligned with business goals can influence the timing of adoption by a specific company.

SnapLogic's flagship generative AI addition to the platform, [SnapGPT](#), has seen adoption from users in a range of industries, including higher education, technology, and manufacturing.

GenAI use cases by function

Then within each organization, certain business functions are more likely to adopt GenAI solutions than others, and for different purposes.

IT (Information Technology)	IT can use generative AI for tasks such as code generation, automation, self-service help desk, and network optimization.
Research and development	In industries like pharmaceuticals and scientific research, generative AI can assist with data analysis, drug discovery, research summarization, and the generation of research reports.
Engineering	Engineering teams may be early adopters of generative AI, especially in industries like manufacturing and product design. AI can assist in generating designs, simulating outcomes, and optimizing processes.
Marketing	Marketing teams are increasingly using generative AI for content creation, including writing, graphic design, and video production. AI tools can assist in creating personalized marketing campaigns and analyzing customer data.
Customer service	Customer service functions may adopt AI for chatbots, virtual assistants, and automating routine customer interactions. AI can provide 24/7 support and handle common customer queries. AI can also be used to coach agents to improve first-call resolution.
Legal	Legal departments may use AI for contract analysis, legal research, and document generation. AI can help streamline legal processes and reduce the time spent on repetitive tasks.
Sales	Sales teams can use AI to segment sales leads and personalize sales pitches. AI-driven chatbots and virtual sales assistants are also becoming more common.

When adapted uniquely to each function, generative AI reshapes operations and enhances productivity across various sectors within organizations.

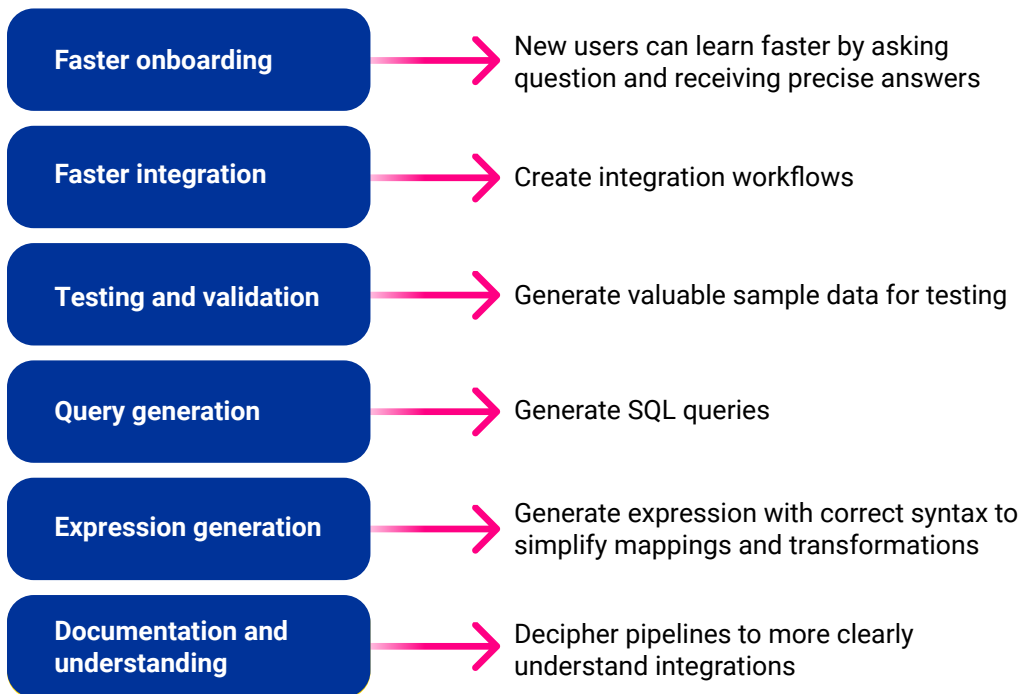
SnapGPT is a versatile and valuable part of the toolkit for IT teams enabling integrations and automation. And because the SnapLogic platform is centralized and easy to use, every function in an organization can benefit from its capabilities. See how marketers are using SnapGPT with [Credera's Marketing Analytics Platform](#)

GenAI for data and application integration

Let's take a closer look at how IT teams — an organization's critical hub for technology — are impacted by this monumental advancement.

As the modern technology stack (legacy systems, cloud applications, data warehousing, etc.) has expanded, it's gotten more complex, which makes data and app integration a formidable hurdle — accounting for almost 50% of a typical IT department's backlog of work. They're also spending a third of their time (34%) just managing legacy systems.

Generative AI has the potential to obliterate roadblocks to efficiency and simplify the complex by expediting integration workflows and pipeline creation. For example, using conversational prompts to perform the following actions:



GenAI is emerging as a promising solution for simplifying complex data and application integration tasks. However, it comes with its fair share of challenges, including cultural and process-related issues, which are crucial to overcome before unlocking AI's full potential.

This requires a tilt towards a performant analysis model fostering both creativity and growth, necessitating a keen focus on composability and collaborative strategies. Amid rapid technological disruption, comfort with change is pivotal.

Tips for adopting generative AI

1. Commit to continuous learning

It is important to step back and recognize that learning is no longer a once-in-a-lifetime phenomenon, but a continuous process. Technological advancements like GenAI can significantly impact our professional lives, particularly those in the IT ecosystem. The requisite skills for today's evolving job market are changing rapidly, and require adaptation.

3. Think of it like “ideas as a service”

Many generative AI tools can be catalysts for jumpstarting ideas and turning them into workflows that users can then refine and improve. The omnipresence of AI tools in today's fast-paced corporate world can be daunting, but they can serve as valuable thought-starters or a helping hand to overcome potential creative hindrances in various business processes.

2. Revamp the business mindset

The advent of GenAI provides a new well of untapped creativity. Businesses should harness this resource and rethink their strategies to be more inclined toward performance, creativity, and growth. This shift requires a robust foundation of collaboration, composability, and a culture of open discussion about AI.

4. Stay human

It will always be vital to put trust in human ingenuity, even — and perhaps especially — with the introduction of powerful technological advances. Keep the lines of communication open and make sure to provide your teams with adequate training and documentation for all AI advancements.

The SnapLogic approach: Generative Integration

SnapLogic recognized early on the game-changing potential of generative AI for integration. Our robust AI Suite is continuously optimized to help companies integrate, automate, and orchestrate data significantly faster and further than common methods:

- **SnapGPT:** A generative AI copilot that turns intentions into integrations using natural language commands
- **AutoSuggest:** A powerful recommendation engine that suggests next steps and how to complete your pipelines/workflows
- **AutoLink:** Automates data mapping between source and target
- **AutoPrep:** Streamlines data normalization, cleansing and preparation
- **IDP:** Simplifies data extraction and insights generation from documents

The benefits of generative integration transform every element of the platform:

	Generative Integration	Traditional Integration
Users	Everyone, welcoming all skill levels	Limited to advanced integrators
Time to value	10X faster - Achieve results in mere days and hours	Takes weeks or months
Learning curve	Rapid onboarding via contextual guidance and ChatGPT-like interface	Demands lengthy training and education
Integration creation and refinement	Quick integration in natural language.	Largely manual or guided. Relies on several hard-to-navigate templates
SQL query formulation	Turn high-level intentions into precise SQL	Requires expert knowledge for manual formulation
Data transformation	Easier data transformation via a deep understanding of source/target schema	Demands manual coding
Documentation	Instant documentation	Manual documentation; only a fraction (less than 3%) get documented
Pipeline refactoring*	Streamline integrations via automated identification of redundancies and opportunities for improvement	Requires manual pipeline analysis and refactoring
Connector creation*	Gen AI-driven rapid new connector creation	Dependent on existing connectors; new ones take time
Operational excellence*	Quick issue resolution with failure prediction, automation and swift self-healing	Lengthy root-cause analysis needed for issues

* Roadmap

From GenAI to generative integration, and beyond

SnapLogic's generative integration isn't just a tool — it's a faster, smarter, and more efficient future for digital transformation.

Aimed at user inclusivity, SnapGPT has particular appeal for those without extensive coding or data science backgrounds. With a simple conversational prompt from the user, SnapGPT uses keyword extraction and tokenization to identify intent, find top-grade data samples and patterns, and return effective responses — in minutes.

Generative integration can help companies surmount persistent challenges (i.e., clearing out that IT backlog) and focus on strategic objectives like enhancing products or services and driving results. In a mutating tech landscape, adaptiveness, systems thinking, and innovative culture will be key to unlocking the potential of generative integration.

As our understanding of generative AI deepens, its potential in complex processes like integration becomes more apparent and exciting. The journey, of course, will have its share of obstacles, but the benefits—ranging from speedy integrations to fostering creative models—promise a compelling trek ahead.



Witness the future of business automation with the launch of GenAI Builder from SnapLogic. The first ever LLM-powered tool for application development — no coding required.



SnapLogic is the leader in generative integration. As a pioneer in AI-led integration, the SnapLogic Platform accelerates digital transformation across the enterprise and empowers everyone to integrate faster and easier. Whether you are automating business processes, democratizing data, or delivering digital products and services, SnapLogic enables you to simplify your technology stack and take your enterprise further. Thousands of enterprises around the globe rely on SnapLogic to integrate, automate and orchestrate the flow of data across their business. Join the generative integration movement at snaplogic.com.