Revolutionize Your Analytics with Artificial Intelligence

The Power of Integrating Generative AI with BI

AI/ML Adoption
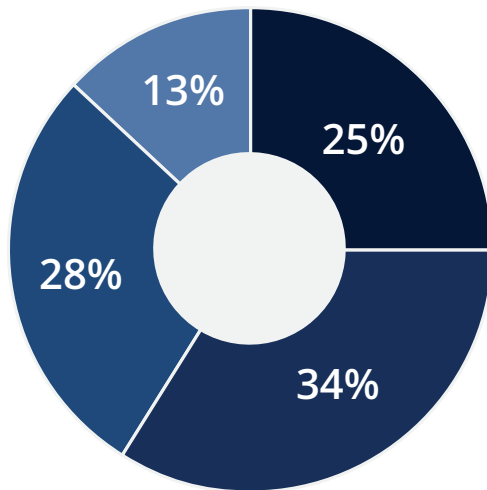Nearly 9 in 10 organizations plan to adopt

- 25%
- 34%
- 28%
- 13%

Legend:
- Very important/ use currently
- Important/use within 12 months
- Somewhat important/ plan to use
- Not important/ no plan to use

Generative AI Is Driving Awareness of AI's Value

Artificial Intelligence (AI) is all the rage, and for good reason. Generative AI (GenAI) has brought AI into the mainstream, making insights more accessible and individuals more productive.

Our research shows that AI can provide a competitive advantage, improve customer experiences, lower costs and improve the bottom line. As a result, **one-quarter of organizations currently use AI, 34% plan to adopt AI within the next 12 months and eventually 9 in 10 (87%) plan to adopt AI**. Nearly all organizations that already use AI plan to increase or maintain their levels of investment. GenAI also enables software vendors to improve productivity with, and accessibility to, various capabilities thus making their products easier to use.
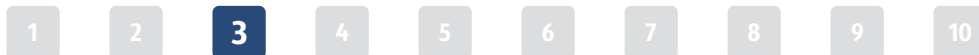
Takeaway: Embrace GenAI or risk falling behind.

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AI Requires Specialized Skills

Despite its promise, traditional AI has been hard for most organizations to tackle alone. **Two-thirds of organizations (65%) don't have the skills they need to successfully apply AI.**

Highly skilled data scientists who can develop and apply AI models are expensive resources that are difficult to find. And, because the skills are so specialized, AI and machine learning teams will likely remain independent of business intelligence (BI) teams for the foreseeable future. In most organizations, the typical scenario is that a few skilled resources create AI-based analyses, but the outputs of their models are rarely made available as data points for use in BI analyses. The promise of enabling all analysts—and the broader community of data users—with AI has not materialized.

AI and Machine Learning
Market Assertion

Through 2026, AI and ML approaches will remain largely independent of business intelligence approaches, requiring three-quarters of enterprises to maintain multiple, separate skill sets.

Matt Aslett
Director of Research, Analytics and Data

Takeaway: Recognize the skillset challenges that AI presents so you can overcome them.

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AI Can't Always Be Trusted

AI governance is challenging, but it's necessary for creating trust in AI-based analyses. The outputs of AI processes are very much influenced by the data used to create the models. If the data contains undetected errors, the AI models will have errors. If organizations need to document how decisions are made, for example due to regulatory requirements, they must preserve the models that were used. This can become compli-cated since AI models must be updated regularly to maintain their accuracy.

As a result, **only one-quarter of organizations (23%) have governance policies in place for AI**. But an approach that lacks governance will not be successful.

Takeaway: Governing AI requires discipline, but governance is necessary to create trust in the models that are used.

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Generative AI to the Rescue

GenAI can provide the vast benefits of AI without requiring dramatic skillset changes. **One of the most enticing aspects of GenAI is natural language processing (NLP) powered by large language models (LLMs).** Prior to the popularization of GenAI in late 2022, developing NLP models to interact with data and analytics was cumbersome. The models needed to be programmed very carefully to deal with all the various ways a question might be asked.
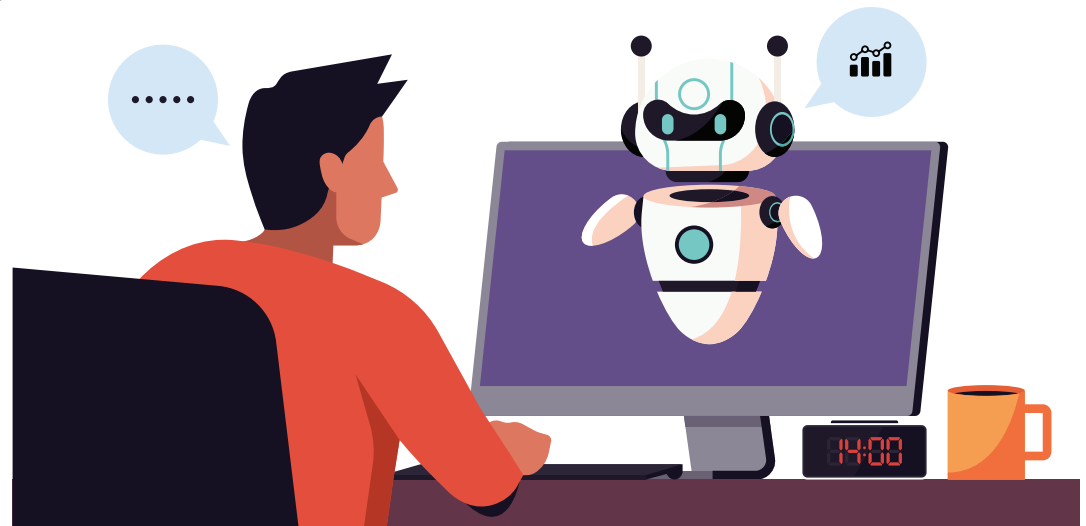
With LLMs that support GenAI, this process becomes much easier. Using NLP and other GenAI capabilities can enhance many aspects of using analytics software.

Takeaway: Take advantage of GenAI without needing specialized skills.

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Enable Analytics Within the Workforce

Natural language queries or search capabilities open up a new world of possibilities for individuals accessing data and analytics. Ask questions using natural language. Get explanations or narrative responses to those questions. Have a conversation with the data and metrics of the organization rather than needing to understand complex database concepts like joins and correlated subqueries.

Nearly everyone in the organization can use natural language processing with little or no training. As a result, **people can share information more easily throughout the organization without any dependency on IT or analysts with specialized skills**. This in turn reduces the backlog on these resources, freeing them to work on other more valuable tasks.

Takeaway: Harness NLP to give all users easy access to the information needed to make better decisions.

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Create Content Automatically

Natural language processing also makes it much easier for content creators to design and build powerful visualizations and dashboards. An individual can **describe the type of analysis they would like to perform**, including which data to use and how they would like the analysis displayed. Using these instructions, **BI tools enhanced with GenAI can produce a first draft of the display**. This draft might require some fine tuning, but that can also be done with instructions. As the dashboards are created, previous design choices are also considered.

This approach makes individuals much more productive. It also makes it possible for many more individuals to access capabilities that were time-consuming or cumbersome for them to use previously.

Takeaway: GenAI makes analytics more accessible and enhances productivity.

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Make Data Professionals More Productive

Data professionals must complete many complex tasks, including working with SQL and processing and creating data models. GenAI helps with both of these since LLMs can be used to generate or explain SQL code. In the parts of BI tools that require SQL statements or other code, a natural language description of what is needed can produce the appropriate, optimized SQL to accomplish the task.
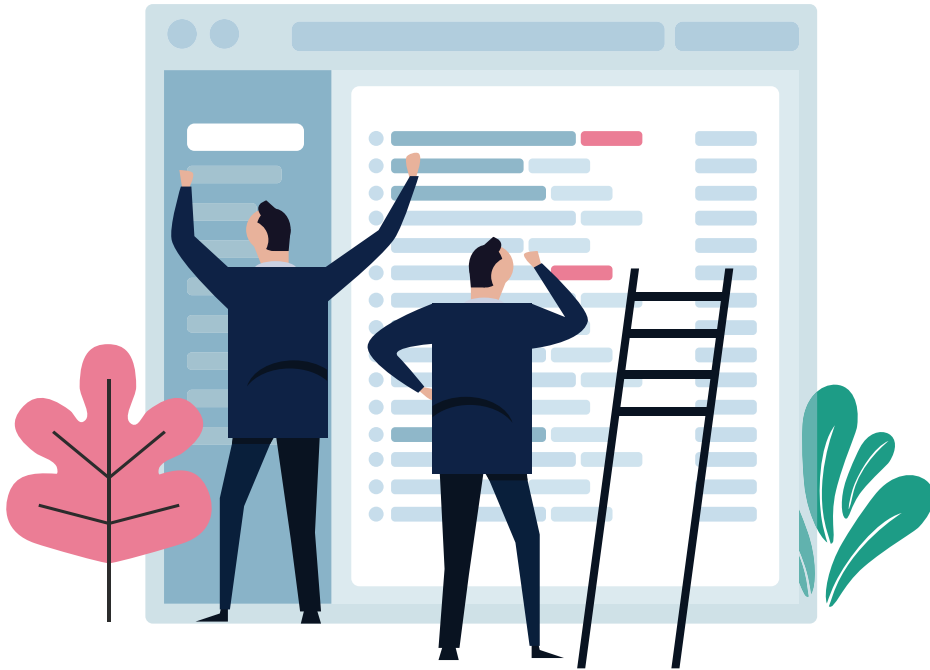
GenAI-powered chatbots can assist in many tasks that data professionals perform ranging from building data models to preparing data for analyses. With AI assistance, joining tables, summarizing data and creating the semantic model to support analyses all become much easier.
Without the assistance of GenAI, each of these tasks would be much more time consuming.

Takeaway: Simplify complex data processing tasks with GenAI to increase productivity.

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Don't Do It Yourself

While GenAI is extremely valuable, developing and maintaining LLMs is expensive and time consuming. Training these models requires access to very large amounts of data and high-powered computing resources. It could cost millions.

Fortunately, **BI vendors can do the work while their customers reap the benefits, delivering GenAI capabilities based on widely used, enterprise-ready LLMs.** It relieves you of the burdens of deciding which LLMs to use and keeping up with the latest developments while still giving you the value and power of GenAI. Instead of focusing on upkeep, you can focus on the value of the data and how to use the insights produced to improve your business.

Takeaway: BI vendors that embrace GenAI help improve productivity for everyone who works with data.

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GenAI Makes BI More Powerful and Drives Adoption

It's no exaggeration to say that **GenAI is transformative for business intelligence, making information easier to access, analyze and understand for everyone**. These advances not only make the workforce more productive but also ensure more consistency and trust in an organization's analyses. All workers have easy access to more advanced analytic capabilities leading to a systematic way to thoroughly explore data, regardless of who is performing the analysis. Very soon, it will be unthinkable to use BI without GenAI. Now is the time to get started.

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