



IBM Cloud

Unleash data and AI for competitive advantage

Ready your data for AI and hybrid cloud

Artificial intelligence (AI) has the potential to add almost \$16T to the global economy by 2030¹, but 81% of business leaders do not understand the data and infrastructure required for AI.² They need a prescriptive approach.



Contents

What is AI?

Predict outcomes, automate processes and optimize time with AI

The challenges with AI

AI is not magic, but hard work

Why modernize your data architecture for AI?

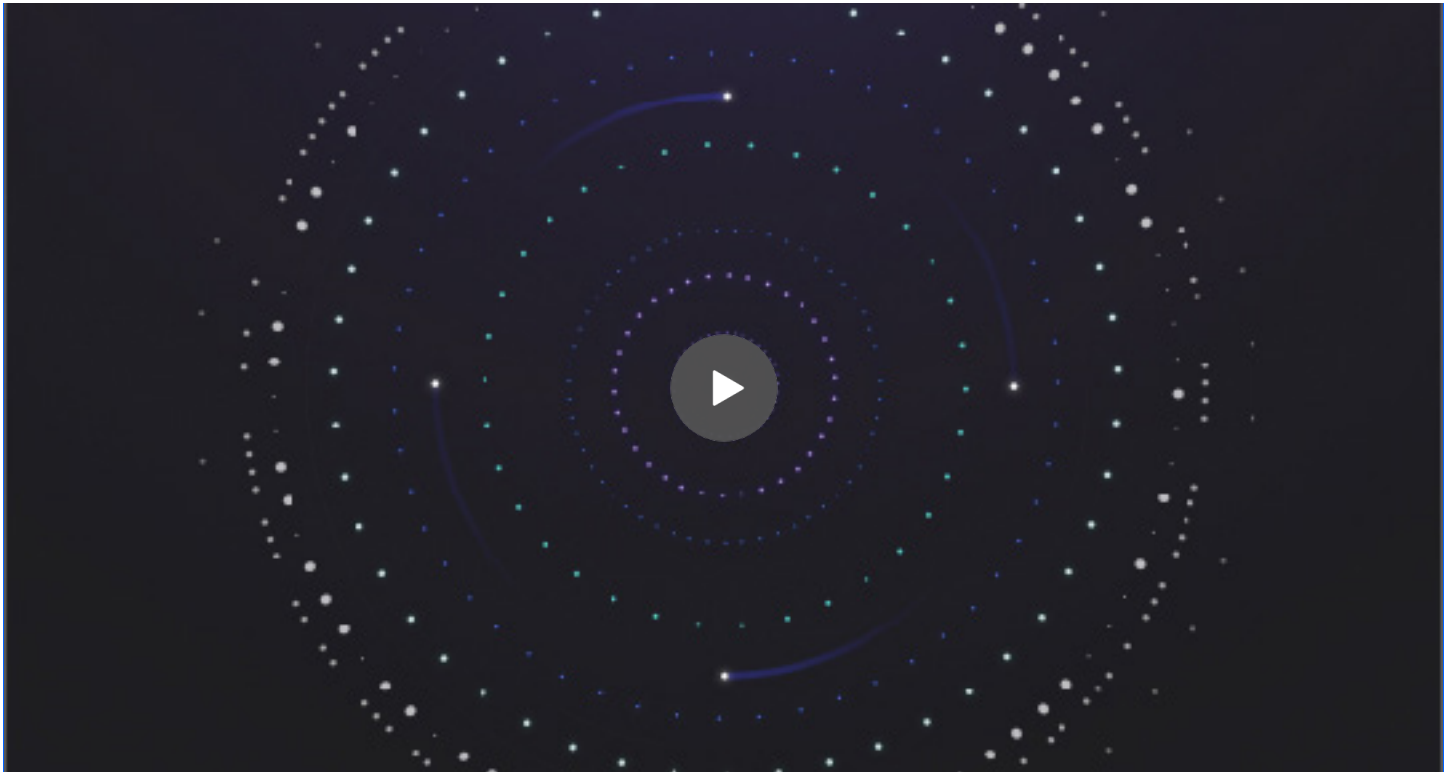
A thoughtful and well-architected approach can unleash the potential of AI

Accelerate your journey to AI: How IBM can help

Transform your business with guiding principles

How to accelerate your AI journey with IBM expertise

Use IBM's deep expertise and technology to drive AI adoption



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What is Artificial Intelligence?

AI is the defining transformational technology of our time.

Instead of following a set of rote, pre-programmed instructions, AI enables machines to learn, and then “act,” on information. Your voice-activated phone, technologies such as speech and image recognition, autonomous vehicles, the smart devices in your home – all of these advances were made possible by AI technology.

AI also marks a fundamental advancement in critical, often time-consuming, business processes. It’s poised to dramatically enhance human decision-making and improve an organization’s ability to make predictions, automate business practices, and optimize logistics.

Here’s how AI boosts the enterprise’s ability to predict, automate, and optimize:

1. Predictions:

Organizations want to be able to forecast what’s going to happen in their business, at both the macro and micro level.

2. Automation:

Performed manually, many business processes occupy employees’ time. With AI, employees are free to focus on higher-value work.

3. Optimization:

This could span from optimizing routing, logistics and marketing spend to configuring your cloud installation.

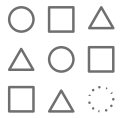
The challenges with AI

Despite the hype, the reality is that AI isn't magic. Companies of all sizes, across many industries, are struggling to adopt AI. While the power and potential of AI is clear, the challenges facing these companies involve three essential components: data, skills and trust.



Data:

Data is the lifeblood of AI. Organizations need to solve for data complexities and ensure data compliance.



Skills:

Because AI skills are rare, they're in high demand. Organizations need technology that is more easily accessible to help their workforce focus on higher value work.

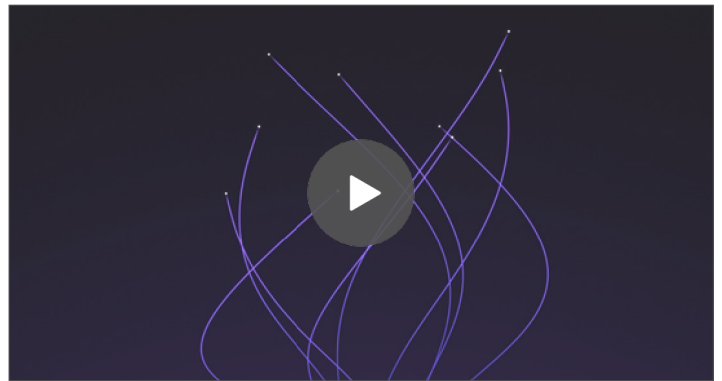


Trust:

AI recommendations or decisions must be fully traceable so that organizations can scale and automate across the enterprise.

Why modernize your data architecture for AI?

The vast majority of AI failures aren't due to AI models: they're failures in data preparation and organization. Successful AI models first require your collection and organization of data. Simply put: there is no AI without an information architecture (IA). With a unified, prescriptive, and open information approach, organizations can modernize their data architecture to make their data ready for an AI and hybrid cloud world.



IBM Watson: Revolutionizing Business in the Digital Age

Accelerate your journey to AI: How IBM can help

The [AI ladder](#) gives companies a guiding set of principles designed to transform their business by instructing four key areas of AI: how they collect data, organize data, analyze data, and, ultimately, how they infuse AI into their organization.

1. Modernize

“Modernize,” in the AI context, means building an information architecture for AI that provides choice and flexibility across the organization. In order to meet today’s demands and stay competitive tomorrow, organizations need an efficient, agile data architecture. IBM Cloud Pak™ for Data can provide organizations a hybrid, cloud platform to leverage their data and applications across any cloud (public, private, on-prem) via containers.

[Learn more about data modernization](#) →

2. Collect

Once an organization has modernized its architecture, it’s imperative for them to make their data simple and accessible. AI is only as good as the data. IBM Db2 is a family of hybrid data management products offering a complete suite of AI-empowered capabilities designed to help manage structured and unstructured data on premises as well as in private and public cloud environments.

[Learn more about data management](#) →

3. Organize

Confidence in your AI replies on trustworthy, complete, and consistent data. Data must be cleansed, organized, catalogued, and governed to ensure that only authorized individuals are able to access it. IBM Watson Knowledge Catalog is a unified data catalog where users can quickly find, curate, categorize, and share data, analytical models, and relationships between members of the organization.

[Learn more about Data Ops](#) →

4. Analyze

Once data is collected and organized in a trusted, unified view, an organization can now build and scale AI models across the business. This allows companies to glean insights from all of their data, no matter where it resides, and engage with AI to transform their business – resulting in a clear competitive advantage. IBM Watson Studio, together with Watson Machine Learning and Watson™ OpenScale™, is a leading data science and machine learning platform built for an AI-powered business.

[Learn more about Data Science and AI](#) →

5. Infuse

Organizations can help advance their business agenda by putting AI to work in multiple departments and within various processes—from payroll, to customer care, to marketing—drawing on predictions, automation and optimization.

IBM Watson Assistant offers organizations the ability to build conversational interfaces into any application, device, or channel. Available on any cloud, Watson Assistant allows businesses to bring AI to their data and apps wherever they are.

[Learn more about putting AI to work](#) →

How to accelerate your AI journey with IBM expertise

With decades of experience and breakthroughs in AI, IBM brings the knowledge and capability to any organization, regardless of size or industry, through a set of leading products, services, and methodologies. This experience means IBM is uniquely positioned to be a trusted partner for organizations, no matter where they are in their AI journey. The IBM Data Science Elite team, for instance, works together with your team and your data to give organizations the skills, methods and tools to win with AI in weeks.

Conclusion

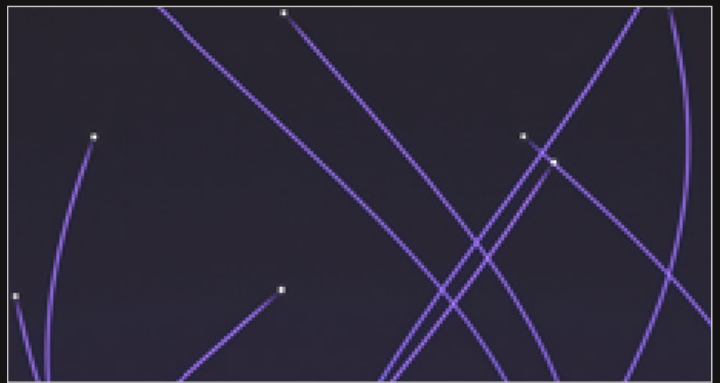
It's clear that in today's hybrid, cloud world, it's essential for organizations to modernize their information architecture (IA) to succeed with AI. Simply put, without the key component of modern IA, your data won't be connected from the necessary sources and made accessible across teams. Although AI isn't the mystical "set it and forget it" black box we've been waiting for, with the proper tools, business practices, and approach, your organization can harness the power of AI, address your core business problems, and create remarkable, personalized customer experiences.

Additional resources



Accelerate your journey to AI

Learn how to make your data ready for an AI and hybrid cloud world. →



IBM Watson

Revolutionizing business in the digital age. →



Visit a garage location

Innovation from concept to reality with speed and impact. →



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- 1 PWC. AI to drive GDP gains of \$15.7 trillion with productivity, personalisation improvements. June 27, 2017.
- 2 Sam Ransbotham, David Kiron, Philipp Gerbert, and Martin Reeves. MIT Sloan Management Review Research Report – Reshaping Business With Artificial Intelligence. 2017.