IBM **Cloud**

Unleash data and AI for competitive advantage

Ready your data for AI
and multicloud

Artificial intelligence (AI) has the potential to add almost $16T
to the global economy by 2030[1], but 81% of business leaders
do not understand the data and infrastructure required for AI.[2]
They need a prescriptive approach.

IBM

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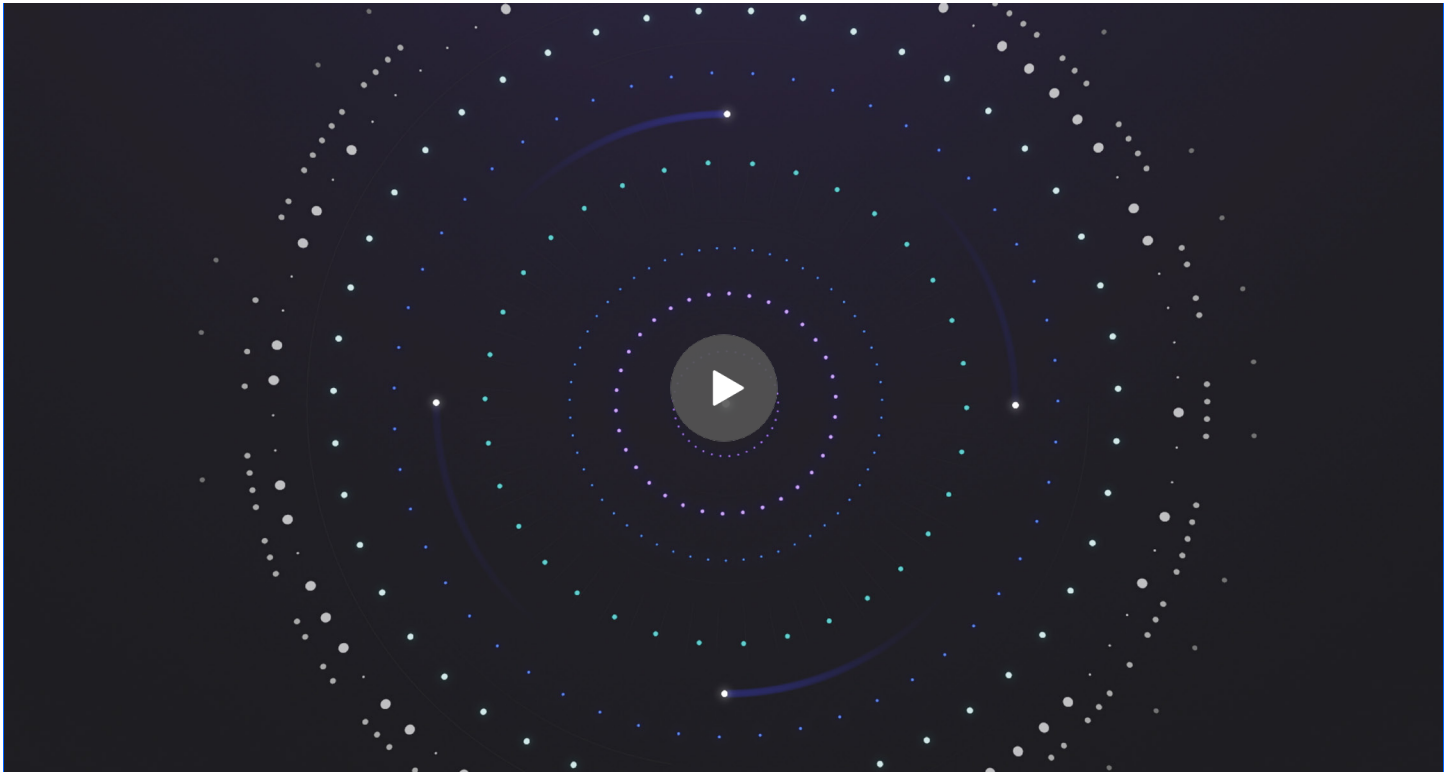
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What is Artificial Intelligence?

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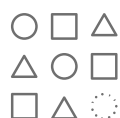
Skills:
Because AI skills are rare, they're in high demand. Organizations need technology that is more easily accessible to help their workforce focus on higher value work.

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 multicloud world.
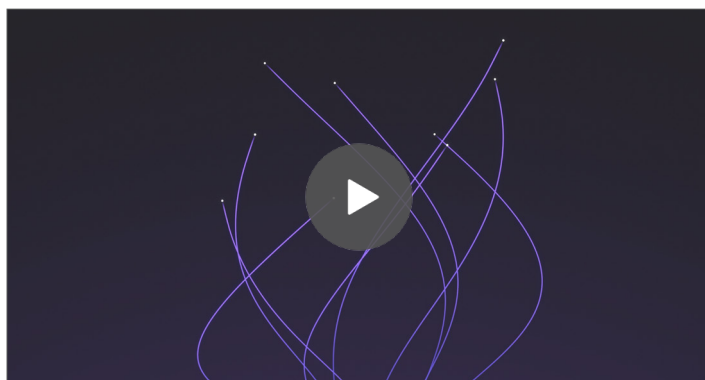
IBM Watson: Revolutionizing Business in the Digital Age

The AI Ladder:
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, multicloud platform to leverage their data and applications across any cloud (public, private, on-prem) via containers.

Forrester Wave 2019 →

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.

Why choose a cloud data warehouse? →

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.

The value of IBM Watson →

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.

Forrester on Predictive Analytics →

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.

What is cognitive IT management? →

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, multicloud 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

The AI Ladder
Learn how to make your data ready
for an AI and multicloud world. →
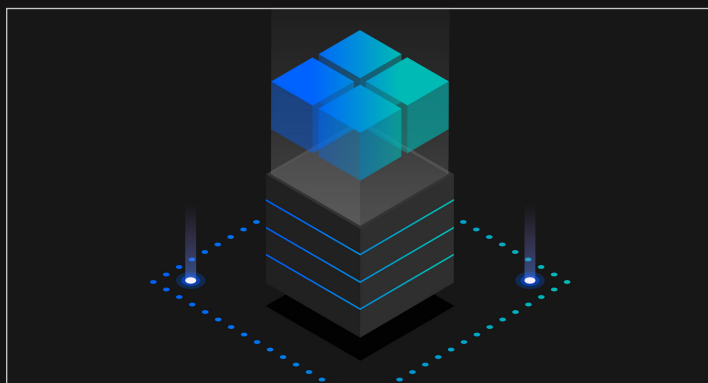
IBM Cloud Paks
An efficient and reliable way to build,
move and manage on cloud. →

Visit a garage location
Innovation from concept to reality
with speed and impact. →

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.

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