



data.world

The Enterprise Guide to AI Readiness

Insights from the data.world AI readiness survey

01.

Introduction

Insights from the data.world AI readiness survey

Artificial intelligence is no longer a futuristic concept—it's a present-day business imperative. Companies worldwide are rushing to integrate AI into their operations. In 2024, global AI adoption surged to [72% of organizations](#) using AI in at least one function – a big jump after years hovering around 50%.

Business leaders are pouring resources into AI; in fact, AI is projected to contribute a staggering [\\$15.7 trillion](#) to the global economy by 2030. Over [92% of companies plan to increase AI](#) investments in the next few years.

The promise of AI is transformative: enhanced customer experiences, streamlined operations, automated decision-making, and innovative product development. But beneath the excitement lies a critical reality; AI is only as good as the data that powers it. Studies show [over 80% of AI projects fail to deliver value](#).

Why? Too often organizations focus only on technical tools and ignore organizational readiness. Most enterprises evaluate AI readiness purely from a technology perspective—checking if they have the right algorithms, infrastructure, or data pipelines. But research reveals that [around 70% of the challenges in AI implementation stem from people and process issues, not technology](#).

As Dael Williamson, EMEA CTO at Databricks, once noted: “We continue focusing so much on the technical stuff, but we need to elevate it more. I want to have business observability. This is the stuff that the CRO wants to know about immediately. That’s what’s going to drive money.”

In other words, many AI initiatives falter because companies overlook crucial factors beyond the tech itself: governance, workforce preparedness, business alignment, and risk management.

Global AI maturity is advancing. More companies have moved AI from a minor experiment to a widely implemented, value-driving capability in 2024, compared to 2023.

This reflects increasing commitment to enterprise AI, but success demands more than technology alone.

This ebook, based on data.world’s “AI Readiness Survey,” provides a clear picture of where organizations stand today, what challenges they face, and most importantly, what concrete steps they can take to build a solid foundation for AI success.

02.

About the AI Readiness Survey


The data.world [AI Readiness Survey](#) was designed to help organizations benchmark their preparedness across seven critical domains:

1. Data culture
2. Governance and compliance
3. Data management and enablement
4. Data quality and semantics
5. Data operations and infrastructure
6. AI strategy and change management
7. Advanced analytics and genAI

With 24 questions across these categories, the survey provides a comprehensive assessment of an organization's readiness for AI implementation. We surveyed hundreds of participants across 14 US states and 10 countries outside the US.

“Many GenAI applications no longer have a human in the loop. The moment you cross that boundary, it's very, very difficult to maintain high data quality. Most of the time there's a direct conduit to the customer... you're dealing with a non-deterministic black box, you're dealing with introducing unstructured data which many folks don't know how to work with or govern, and natural language which is much harder to evaluate.”



Kevin Hu
CEO




PODCAST

Data Quality: The Key to
GenAI Success with Kevin Hu



03. Overall findings

Our survey reveals an average overall readiness score of 54.5% across completed surveys. This middle-of-the-road score suggests that most organizations have begun their AI readiness journey, but still have significant room for growth.

WHAT THIS MEANS

This average score reveals a critical gap between AI aspirations and readiness reality. Organizations are caught in the middle. They've made initial investments in data infrastructure and have begun developing strategies, but they haven't achieved the maturity needed to fully leverage AI at scale. This readiness gap explains why many AI initiatives stall after initial pilots or fail to deliver expected value.

Most organizations find themselves in one of three situations:

1. **Building foundations** (scores below 50%): Still putting basic data infrastructure and governance in place, making them unprepared for enterprise-wide AI adoption
2. **Developing capabilities** (scores 50-70%): Have established data foundations but need to enhance specific capabilities like data quality, semantic understanding, or AI governance
3. **Leading the field** (scores above 70%): Have mature data practices and are well-positioned to scale AI initiatives across the enterprise

The stark reality is that many organizations are plunging into AI—particularly generative AI—without the necessary foundation. This is the crux of the AI readiness challenge: organizations need to focus on what matters. The data deluge approach is failing; what's needed is thoughtful curation and context that connects data to business value.

03. Overall findings

Category Breakdown

Our survey reveals interesting patterns across the seven categories:

Data operations and infrastructure (61.2%) emerges as the strongest area.

WHAT THIS MEANS

Organizations have prioritized investments in the technical underpinnings of their data stack—cloud infrastructure, data pipelines, and storage solutions. This is logical, as these elements are more concrete, measurable, and align with traditional IT expertise. However, high scores here can create a false sense of security.

Robust technical infrastructure is necessary but not sufficient on its own for AI success.

Data culture (59.5%) shows that organizations are making strides in developing data-driven mindsets, though there's still room for improvement.

WHAT THIS MEANS

Many organizations have recognized the importance of data-driven decision making and are working to instill this mindset. But while executives may espouse data-driven values, the practices often don't permeate throughout the organization. Many decisions are still made based on intuition rather than data.

Governance and compliance (54.7%) reflects growing awareness of the importance of data governance, particularly in the context of AI applications.

WHAT THIS MEANS

Regulatory pressures like GDPR, CCPA, and industry-specific regulations have forced organizations to implement some governance measures. However, many view governance primarily as a compliance exercise rather than a value driver. Organizations are doing the minimum required, but not leveraging governance as a strategic advantage. The rise of AI, particularly generative AI, is now exposing these governance gaps as organizations struggle with issues like bias, privacy, and explainability.

03. Overall findings

Category Breakdown

Data quality and semantics (53.1%) indicates that organizations recognize the importance of data quality but still struggle with implementation.

WHAT THIS MEANS

This score highlights one of the most critical gaps in AI readiness. Organizations acknowledge data quality matters but haven't established systematic approaches to measuring, monitoring, and improving it. Most are still in reactive mode—addressing quality issues after they cause problems rather than proactively preventing them.

The semantic understanding component scores even lower. Organizations struggle to establish shared meaning and context for their data; a critical requirement for effective AI applications.

AI strategy and change management (52.5%) suggests that while strategies exist, they may lack depth or organizational alignment.

WHAT THIS MEANS

Many organizations have developed AI strategies in response to competitive pressure and executive mandates, but these strategies often lack substance. They focus on technology without adequate attention to people, processes, and change management. This explains why many AI initiatives fail to scale beyond pilots; the broader organizational changes needed to support them aren't addressed.

Data management and enablement (50.5%) shows that many organizations struggle with making data discoverable, accessible, and usable.

WHAT THIS MEANS

This is the weakest area of readiness and represents a fundamental barrier to AI success. Organizations have accumulated vast data stores but struggle to make them findable and usable by the people who need them. Data catalogs and metadata management are often immature or nonexistent.

03. Overall findings

Category Breakdown

Advanced analytics and genAI (54.2%) reflects the growing adoption of advanced analytics and generative AI, but with considerable variation in maturity.

WHAT THIS MEANS

While organizations are experimenting with advanced analytics and generative AI, they haven't fully integrated these capabilities into their operations. Many are in a pilot phase, with isolated teams conducting experiments that don't connect to broader business processes.

This category breakdown reveals a critical insight: organizations are stronger in technical infrastructure than in the human, process, and knowledge aspects of AI readiness. Yet it's precisely these latter elements that often determine AI success or failure.



“Start by understanding your business and the purpose for the data, and then you can prioritize. Each business capability has value that you can put money against. It might be defending revenue, generating revenue, saving money, managing risk. You can quantify these things and say this is the priority for where we're going to start.”



Ben Clinch
Principal Enterprise Architect



PODCAST

Automating Data Governance, it's the only way to go w/ Ben Clinch from BT Group



04.

The 4 pillars of AI readiness

For AI to create real business impact, companies must focus on four key pillars:

01

Strategic and business readiness

KEY QUESTION

How well does AI align with your business goals?

AI should not be deployed for the sake of innovation—it must have a clear, measurable business purpose. Successful AI adoption requires:

- **Defined AI strategy** – A documented AI strategy that supports long-term business objectives and has executive buy-in. Yet today [only about half of organizations](#) have fully integrated AI into their core business strategy.
- **Clear success metrics** – Measurable KPIs for AI initiatives (ROI, customer impact, efficiency gains).
- **Roadmap for scaling** – A phased roadmap for scaling AI across different business functions once pilot projects show promise, to avoid getting stuck in “pilot purgatory.” ([Only 26% of companies have developed the capabilities to move AI beyond pilot projects to tangible value](#) – the rest remain stuck in proofs-of-concept.

DATA.WORLD'S APPROACH

data.world helps organizations align AI with their business goals by providing a unified data catalog. Our customer success team guides organizations in developing AI-ready data strategies, while our partner network supports broader AI strategy and scaling efforts.

04.

The 4 pillars of AI readiness

02

Workforce and change management readiness

KEY QUESTION

Are your employees and leadership equipped to work with AI?

Technology alone cannot drive AI success—people must be ready for the change. Organizations often struggle with:

- **Lack of AI literacy** – Many executives and employees have limited understanding of AI’s capabilities and limitations. This knowledge gap can lead to misaligned projects.
- **Employee resistance** – Workers may resist AI adoption due to fear of job displacement or change. This concern is widespread – a recent study showed [75% of employees are concerned AI will make certain jobs obsolete](#), and 65% are personally anxious about AI impacting their own job. Without proper change management, such fears can seriously hinder AI initiatives.
- **Skills gaps** – Shortage of expertise in data science, machine learning, and AI development. In industry surveys, companies consistently cite the [lack of skilled AI talent as the #1 barrier](#) to AI adoption.

Solution: Invest in AI training and robust change management. AI literacy must be built organization-wide – from the C-suite to operational teams. This includes educating staff on how AI will augment (not replace) their work and developing new skills at all levels. Change management plans should proactively address employee concerns and involve them in AI adoption.

DATA.WORLD'S APPROACH

data.world empowers teams with AI literacy. We make data and AI models easily accessible through our knowledge-graph-powered platform. Our solutions help to reduce AI-related fears and enable better decision-making. Through customer success planning, we help organizations drive adoption and upskill employees while leveraging partners for deeper training needs.

04.

The 4 pillars of AI readiness

03

Data and infrastructure readiness

KEY QUESTION

Is your data infrastructure AI-ready?

AI is only as good as the data behind it. Many companies face challenges such as:

- **Poor data quality** – Inconsistent, inaccurate, or biased data will lead to unreliable AI outcomes. (Indeed, about [70% of organizations report difficulties with data quality, integration, or governance when trying to implement AI.](#))
- **Lack of accessible data** – Siloed data and lack of real-time data access hinder AI-driven decision-making. If data needed for AI is not readily available or integrated, AI models cannot deliver timely insights.
- **Scalability issues** – Inflexible infrastructure that struggles to handle the computational demands of AI at scale (for example, deploying large models or processing big data streams). Without scalable cloud or high-performance computing resources, even a successful AI prototype may fail in production.

Solution: Before implementing AI, organizations must audit, clean, and structure their data to ensure it is reliable and compliant. This may involve modernizing data architectures, breaking down silos, and establishing strong data governance.

High-quality data pipelines and cloud-ready infrastructure are critical for AI performance. Companies should ensure they have the storage, computing power, and integration capabilities needed to support AI workloads (e.g. GPU clusters for training, data lakes for unified data).

DATA.WORLD'S APPROACH

data.world ensures AI initiatives are built on a strong data foundation by breaking down silos, improving data quality, and enabling real-time data access through a modern data catalog. Our platform accelerates AI readiness with automated governance, metadata-driven insights, and integrations with cloud and analytics ecosystems—helping organizations scale AI from pilot to production.

04.

The 4 pillars of AI readiness

04

Governance, ethics and risk readiness

KEY QUESTION

Is your AI deployment ethical, secure, and compliant?

AI governance is non-negotiable. Without proper frameworks, businesses face risks such as:

- Regulatory violations – AI systems must comply with regulations (GDPR for data privacy, emerging AI laws like the EU AI Act, industry-specific rules, etc.). Navigating these can be challenging – 51% of technology leaders say compliance with AI regulations is a significant barrier to adoption. Non-compliance can result in legal penalties and reputational damage.
- Bias and ethical issues – AI models can unintentionally perpetuate bias or make unfair decisions if not carefully managed. Lack of diversity in AI teams exacerbates this; roughly 70% of organizations worry that homogenous AI development teams lead to biased outcomes. Ethical lapses not only harm users but erode trust among customers and employees.
- Security threats – AI introduces new security concerns, from adversarial attacks on ML models to vulnerabilities in AI-driven processes. Additionally, AI systems often handle sensitive data that must be protected from breaches. Without governance, companies may also misuse AI (e.g. unchecked autonomous decisions) leading to operational risks.

Solution: Implement a robust AI governance framework before and during AI deployment. AI systems should be transparent, explainable, and auditable.

Establish clear policies for ethical AI use (what is acceptable and what isn't) and ensure human oversight where needed. Incorporate fairness checks and bias audits in model development. It's also critical to align AI practices with existing regulations and best practices – for example, following privacy-by-design for data use.

DATA.WORLD'S APPROACH

With built-in governance capabilities, data.world provides the transparency, lineage, and auditability needed for responsible AI. Our platform enforces data policies and helps teams manage AI risk. We collaborate with partners to extend governance expertise.

05.

A step-by-step framework for AI readiness

Achieving AI readiness is a journey. Here is a structured approach to guide organizations:

STEP 1

Conduct an AI readiness audit

Assess current state – Evaluate your organization across the four pillars: strategy, workforce, data, and governance. This holistic audit reveals gaps in each area (e.g. lack of an AI strategy, skills shortages, data issues, or governance weaknesses).

Benchmark maturity – Determine your AI maturity level. For instance, are you in experimentation stage or scaling stage? This helps set a baseline.

Identify gaps & prioritize – Create an improvement plan targeting the biggest readiness gaps. If the audit finds, for example, low data quality or no AI governance, address those early. Prioritize initiatives that will unlock the most value or mitigate major risks.

STEP 2

Develop a business-aligned AI strategy

Link AI to business goals – Ensure every AI initiative maps to clear business objectives or KPIs. Define how AI will drive revenue growth, cost savings, customer experience, etc. This keeps efforts focused on value.

Create an AI roadmap – Lay out short, mid, and long-term AI projects that build on each other. Start with high-impact pilot projects aligned with strategy, then plan how to scale successful pilots across departments.

Secure leadership commitment – Have executive sponsors for the AI strategy and update the company's vision to integrate AI. Make AI a boardroom topic. This top-down support is crucial for funding and cross-department coordination.

05.

A step-by-step framework for AI readiness

STEP 3

Invest in workforce AI training and change management

Upskill and reskill – Provide training programs to develop AI skills at all levels. This could range from basic AI literacy workshops for non-technical staff to advanced ML engineering courses for technical teams. (Training is an ongoing effort – as AI evolves, so should skills. Companies leading in AI often have continuous learning programs.)

Foster a collaborative culture – Encourage a culture where employees embrace AI as a tool for empowerment. Promote success stories of AI augmenting jobs to reduce fear. Engage employees in AI projects early, gathering their input and feedback.

Manage the change – Establish clear communication about AI initiatives. Let employees know why AI is being implemented and how it will impact their work. Set up support (helpdesks, forums) for employees to ask questions or express concerns. Recognize and reward teams that successfully adopt AI in their workflows, reinforcing positive adoption.

STEP 4

Optimize data and technology infrastructure

Improve data quality and availability – Before deploying AI models, ensure your data is clean, unbiased, and accessible. This may involve data cleansing initiatives and integrating data sources into a unified platform. Consider investing in data management tools and data catalogs.

Implement data governance – Create policies for data ownership, privacy, and usage specifically for AI. Define who oversees data used in AI models and how often data is reviewed for accuracy. Good governance reduces regulatory and ethical risks.

Build scalable infrastructure – Modernize IT infrastructure to handle AI workloads. This might mean migrating to cloud platforms that can auto-scale, using specialized hardware (GPUs/TPUs) for heavy ML tasks, and optimizing pipelines for real-time data processing. A scalable infrastructure ensures that as AI usage grows, performance remains robust.

05.

A step-by-step framework for AI readiness

STEP 5

Implement AI governance and risk management

Establish AI ethics and policies – Develop an AI ethics charter or guidelines that align with your company’s values. For example, policies on avoiding bias, ensuring transparency in AI decisions, and obtaining proper consent for data usage.

Set up oversight mechanisms – Create an AI governance committee or assign responsibility to an existing risk committee. They should review AI projects for compliance and ethical considerations at key milestones.

Monitor and audit – Leverage AI audit tools to continuously monitor models for issues like drift, bias, or anomalies. Conduct regular audits of AI systems, especially those in high-stakes roles (finance, HR, etc.), to ensure they are functioning as intended and meeting regulatory requirements.

Plan for incident response – Just as with cybersecurity, have a plan for AI incidents. If an AI system causes an error or unintended outcome, how will it be detected, reported, and corrected? Clear procedures will help manage any AI-related failures responsibly.

“The better you are at managing people,
the better you are at managing AI.”



Ethan Mollick
Associate Professor



PODCAST

We Have Agency Over AI
with Ethan Mollick



06.

AI readiness is a business imperative

Final thoughts

AI is not just an IT project—it's an enterprise-wide transformation. With AI moving so fast, acting now is crucial – especially since a mere [1% of organizations](#) currently consider themselves fully AI-mature.

Most firms are still on the lower rungs of the maturity ladder, which means there is a huge opportunity for those who get ahead on the readiness curve. By focusing on strategic alignment, people, data, and governance, businesses can ensure AI adoption is:

- **Strategically aligned** – AI initiatives firmly linked to business goals and championed by leadership (no more AI experiments happening in isolation or without purpose). When AI is intrinsic to the business strategy, it drives meaningful outcomes rather than technical novelties.
- **Supported by a trained workforce** – Employees across the org chart are AI-aware and AI-capable, reducing talent bottlenecks and resistance. An AI-ready workforce means higher adoption rates and faster realization of AI benefits. (Organizations that invest in upskilling are better poised to innovate continuously).
- **Built on quality data** – AI systems drawing on high-quality, well-governed data, running on scalable, secure infrastructure. This ensures AI outputs are reliable and that solutions can grow with the business needs.
- **Governed responsibly** – AI deployments that include proper oversight, compliance, and ethical safeguards. Responsible AI builds trust with customers, employees, and regulators, allowing companies to expand AI use without backlash.

When done right, AI can deliver transformative value. The gap between winners and laggards is already emerging. [AI leaders are outperforming](#) – studies show companies leading in AI achieved ~1.5× higher revenue growth and 1.6× higher shareholder returns compared to their peers. And where AI projects succeed, the ROI can be substantial (one analysis found an average [250% return on AI investments](#), i.e. \$3.5 returned for every \$1 spent).

These gains come only with the right groundwork. By investing in AI readiness now, organizations set themselves up to capture these rewards and secure their competitive edge in an AI-driven future.

07.

Simpler, smarter data catalog & governance

AI readiness is not a destination but a journey. The organizations that will succeed with AI are those that recognize the foundational role of data and take concrete steps to strengthen that foundation. We encourage you to:



Benchmark your organization by completing the AI Readiness Survey



Develop an action plan to address key gaps



Share the results with key stakeholders to build awareness and alignment



Seek expertise where needed to accelerate your progress



data.world

Don't wait until after AI implementation to discover the critical importance of data quality, governance, and management.

Contact data.world and start building your AI ready foundation today.

[Schedule a demo →](#)

08. AI readiness self-assessment

Appendix

Data culture

- Do we make data-driven decisions consistently?
- Do we have strong data literacy across the organization?
- Do we evaluate the ROI of our data and AI investments?

Governance and compliance

- Do we have a well-defined data governance framework?
- Do we have effective processes for managing sensitive data?
- Do we have an AI governance framework aligned with data governance?

Data management and enablement

- Can we easily discover and access our data?
- Do we treat data as a product with clear ownership?
- Do we have well-documented metadata and lineage?

Data quality and semantics

- Is our data consistently high quality?
- Do we have shared understanding of data meanings across the organization?
- Do we leverage knowledge graphs to connect and contextualize data?

Data operations and infrastructure

- Are our data pipelines integrated and automated?
- Have we adopted cloud technologies for our data operations?
- Is our infrastructure scalable for AI workloads?

AI strategy and change management

- Do we have a clear AI strategy with measurable goals?
- Are we prepared to adapt to AI-driven changes in workflows and roles?
- Do we support employee upskilling and AI talent development?

Advanced analytics and genAI

- Do we have mature analytics tools and capabilities?
- Is our machine learning infrastructure well-developed?
- Do we have a responsible approach to using generative AI and LLMs?



For a comprehensive assessment, we encourage you to complete the full [AI Readiness Survey](#).

This ebook is based on data.world's AI Readiness Survey results and insights from industry experts. For more information or to discuss your organization's AI readiness, [contact data.world](#).



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