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Trusted Al 101:

Tips for Getting Your Data Al-Ready



Your Al future depends on your data

Every business is chasing the promise of Al—faster operations, more personalized customer experiences, and innovative ideas that outpace competitors.

But the Al landscape has shifted dramatically. Generative Al (GenAl) has overtaken traditional Al, unlocking unprecedented capabilities and equally unprecedented risks. These systems can create content and answer complex questions, but they also introduce new challenges.

Hidden bias, hallucinations, and unreliable results are now business-critical risks. And the next wave — agentic AI, which can plan and act autonomously — will only magnify them. In this new era, AI is only as trustworthy as the data it's built on. That makes data integrity not just a technical requirement, but a business imperative. To understand why, let's look more closely at how GenAI and agentic AI are reshaping the rules.

GenAl Risks at a Glance:







Why the Al shift creates data integrity challenges

GenAl brings extraordinary capabilities, but also new vulnerabilities that most organizations aren't prepared to manage. These models can produce confident, authoritative answers that are false. They can display skills they weren't explicitly programmed with, making their behavior in edge cases unpredictable. And at scale, even minor data errors are amplified into systemic reliability issues.

The next wave — agentic AI — raises the stakes even higher. These systems don't just respond to prompts; they plan, act, and reason on their own. To be effective, they must continually ground every decision in trusted, current, and context-rich data. Without it, they can make flawed decisions before an error is caught.

This is why organizations are facing a data integrity crisis. In just the past year, we've seen the cost of failure with chatbots delivering off-brand or misleading customer guidance and reputational damage from biased results that led to lawsuits.

The message is clear — in the age of GenAl and agentic Al, trusted data is not optional. It's the foundation of competitive, compliant, and safe operations. And yet, most organizations aren't prepared. The latest research makes the gap clear.



The Al readiness gap is real

Every Al initiative rests on the same foundation: trusted data — data that's accurate, consistent, and rich in context.

Without it, Al outputs are unreliable at best, damaging at worst.

The 2025 Data Integrity Trends & Insights
Report shows just how far most organizations
have to go:

- 60% say Al is a key influence on their data programs.
- Only 12% report that their data is of sufficient quality and accessibility for Al.
- **62%** identify lack of data governance as the top challenge holding back Al initiatives.

That means most businesses are accelerating Al adoption without the data foundations to support it — exposing themselves to higher risks of bias, hallucination, irrelevant results, and compliance failures.

In short, the potential of AI is immense, but without a data integrity strategy, you're building on sand.

So, what does solving it look like in practice?

Why it matters

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12%

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Solve Top Al Challenges with Data Integrity

The Al readiness gap and its challenges may sound familiar. The good news? They're all solvable. By investing in tailored data integrity capabilities, you can reduce risk and maximize the impact of your Al. Learn how on the next pages.



THE CHALLENGE

Narrow, biased results

Incomplete datasets and separate data infrastructure stacks limit an Al's understanding and produce biased, unreliable results. Because enterprise data is scattered across legacy systems, not all critical data is available where Al runs — creating blind spots and bias.



Untrustworthy results

Inaccurate predictions and recommendations erode trust and slow adoption. Poor data quality is a major culprit, compounded by growing regulatory pressure to comply with data privacy and sovereignty laws.



THE SOLUTION

Data integration

Integrating siloed data and bringing it to where your Al applications run is key to unbiased and trustworthy results. Modern pipelines ensure all relevant data is available in a comprehensive, complete, and timely fashion.



THE SOLUTION

Data quality and governance

Al initiatives require high-quality, fit-for-purpose data. Core data quality and business rules, automated validation and cleansing, and integration with data observability and data governance solutions ensure accuracy, consistency, and compliance.

Proactive monitoring detects anomalies before they reach downstream systems, while governance frameworks provide transparency into collection, storage, and use. This unified understanding helps you enforce policies and procedures that protect your data.

THE CHALLENGE

Lack of contextual relevance

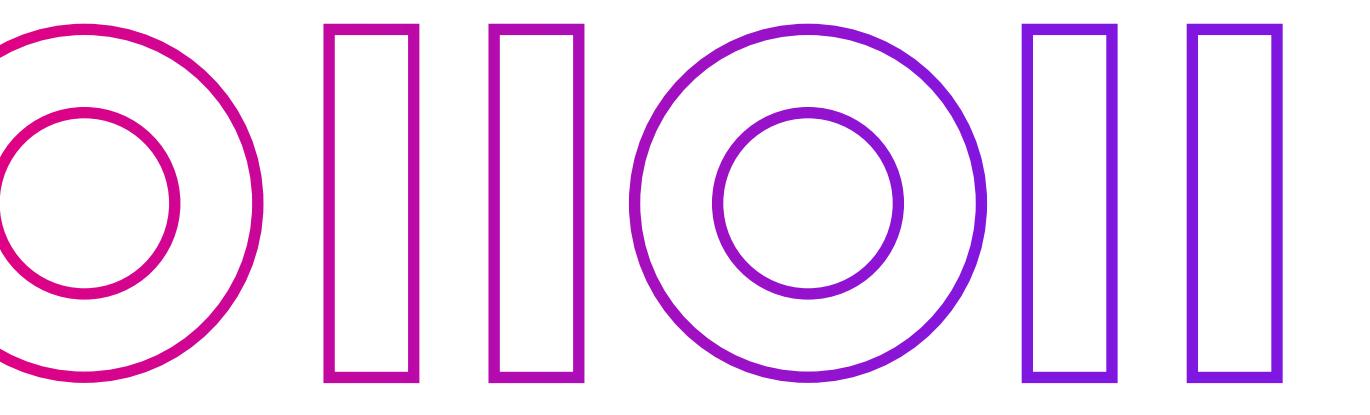
Without context into the nuances and dependencies of a given real-world scenario, Al bases its inference or recommendations on only a small portion of the bigger picture. This can lead to incomplete, inaccurate, or contextually irrelevant results with potentially dangerous downstream impacts.



THE SOLUTION

Spatial analysis and data enrichment

Enrich AI with trusted third-party datasets and spatial insights. Combining location, business, and consumer data with spatial relationships, patterns, and trends ensures models are grounded, producing more relevant and business-ready outcomes.



Together, these considerations highlight that AI readiness isn't just about fixing today's pain points. It also requires anticipating emerging requirements and unlocking underutilized value in the data you already have.

But these challenges are only half the story — the other half is timing. The pace of AI adoption means the cost of waiting is rising fast.

The growing urgency

Organizations are scaling Al initiatives at unprecedented speed, driven by competitive pressure and the promise of transformative outcomes. But this rush has created a dangerous gap: while Al capabilities are advancing rapidly, the data foundations required to support them remain fragmented, ungoverned, and vulnerable.

The stakes are high. Once AI is deployed at scale with poor-integrity data, the cost of fixing mistakes grows exponentially:

- A biased hiring algorithm can process thousands of applications before the issue is caught.
- A customer service chatbot can spread hallucinated policies to millions of users in minutes.
- An agentic Al system can make flawed autonomous decisions that misalign with business objectives.

These aren't just technical glitches — they are existential risks with financial, legal, and reputational consequences that can take years and millions of dollars to repair.

The organizations that act now, treating data integrity as a prerequisite rather than an afterthought, will be the ones that build sustainable competitive advantage. They'll deliver AI systems that stakeholders trust, regulators approve, and customers embrace. Those who delay will find themselves battling bias, hallucinations, and irrelevance.

The choice is simple: invest proactively in data integrity today or face higher costs and greater risks tomorrow.

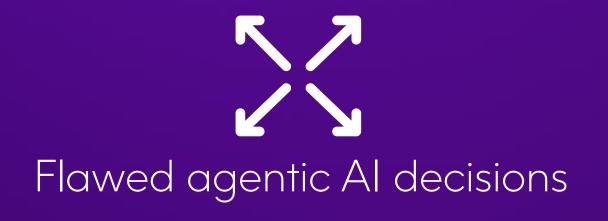
So how can organizations put this into action? It comes down to three core data integrity considerations.

What's at stake?



Biased practices





Three data integrity for Al considerations with Precisely

Training and operating your Al applications with accurate, consistent, and contextualized data is key to reliable results that fuel success. It comes down to three primary considerations. Here's what you need to know and how to achieve your desired results with solutions from Precisely.



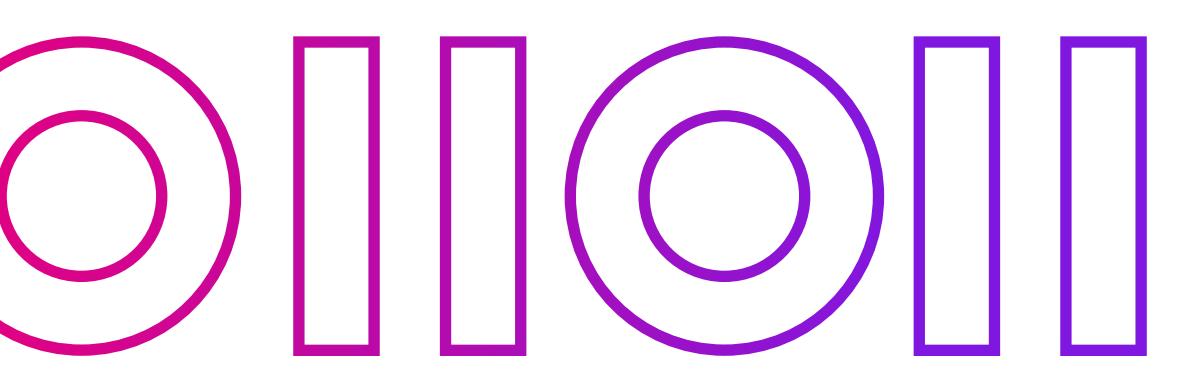


What you achieve with data integrity

Minimize bias, improve accuracy and reliability, and enhance understanding by training Al models with all relevant critical data on-premises, in the cloud, and hybrid environments. That includes complex data residing on your mainframe or mid-range systems.

How you achieve it

Break down data silos and bring fresh data into your Al development environments quickly with modern pipelines from Precisely. By making data accessible "ahead of demand," you give your teams the resources they need to scale Al effectively and reliably.



Fuel your Al applications with trusted data to power reliable results

What you achieve with data integrity

Ensure AI outcomes you can trust. For accurate predictions, recommendations, and effective process automation, models must be trained by data with integrity.

For trusted AI outcomes, your data needs to meet rigorous quality metrics; it needs to be accurate, complete, validly structured, standardized, and free of duplicates. High-integrity data should also be timely, governed using a robust framework, and observed for changes and anomalies.

How you achieve it

Gain transparency into data lineage to continuously improve quality and apply governance across both your data and your Al. Precisely powers these processes wherever your data resides — spanning operational and analytical systems.

Scale confidently with elastic, cost-effective solutions designed to handle the large volumes required for AI training. Automated monitoring and anomaly detection provide ongoing visibility, catching issues before they ever reach downstream environments.

By training, deploying, and monitoring with high-integrity data, you build the foundation of trust your AI results depend on.

Add context to your data for more relevant and nuanced responses

What you achieve with data integrity

Boost your Al applications' accuracy and contextual relevance by enriching the data that fuels them with trusted third-party data and spatial insights.

How you achieve it

Accelerate AI adoption by enriching your data with context that helps models grasp nuance, maintain coherence, and generate responses aligned to real-world scenarios.

Precisely delivers curated, authoritative datasets and location intelligence that expand what you and your Al know — from audiences, demographics, and risk factors to properties, boundaries, streets, and places, along with the patterns and relationships between them.

By incorporating this context directly into your Al pipelines, you enable outputs that are not only more accurate but also more contextually relevant and ready to drive business results.

Precisely helps you maximize the potential of your Al-based solutions by combining critical data and ensuring its optimal quality — governed by a robust framework, monitored to detect degradation, and enriched with essential context from spatial insights and third-party datasets.

These considerations ensure your data is of high integrity and that the resulting Al applications can be delivered with complete trust and reliability. Focusing on data integrity now accelerates both the development and adoption of Al within your organization.



Summary

With the rise of GenAl and agentic Al, prioritizing data integrity has never been more critical.

Al holds enormous potential, but the reality is clear: outputs are only as strong as the data that fuels them. To achieve trusted results, your data must be accurate, consistent, and enriched with the right context. Without it, you risk bias, hallucinations, irrelevance, and ultimately flawed strategic decisions.

The good news is that these challenges are solvable. By focusing on integration, quality and governance, and enrichment, you can build the trusted data foundation your AI requires.

The bottom line: Future-proofing your Al starts with data integrity. Organizations that invest now will accelerate innovation, foster adoption, and create a sustainable competitive edge. Those who delay will face higher costs and greater risks later.

What are your top use cases for Al? What could you achieve if you unlocked its full potential? Whatever your goals, remember: trusted Al starts with trusted data. **Start your data integrity journey with**Precisely — and turn trusted data into trusted Al.

Let's get started



precisely

Precisely is the global leader in data integrity, providing accuracy and consistency in data for 12,000 customers in more than 100 countries, including 95 of the Fortune 100. Precisely's data integration, data quality, data governance, location intelligence, and data enrichment products power better business decisions to create better outcomes.

Learn more at www.precisely.com.

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