



eBook

# Chart the Course for Responsible AI Governance

Harnessing cloud data management to navigate  
AI compliance in the wake of new regulations

**Where data  
& AI come to** 



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# Foreword

**AI technology has rapidly moved from the edge of the adoption curve to mainstream interest. This pace of change can be unsettling for many enterprises, especially as they grapple with the reality of using AI effectively and responsibly.**

Numerous aspects are pivotal to this technological shift, with effective data management at its core.

This eBook endeavors to help you chart a course for responsible AI governance and what this means towards supporting compliance with evolving AI regulations, understanding the challenges of this changing legal landscape, and offering guidance for enabling integrated **cloud data management** solutions to achieve your goals.

As part of this analysis, a checklist of actions outlined for each section will support your enterprise in developing a data governance strategy for responsible AI outcomes.



# Introduction

## Redefining Business With Generative AI

“Generative AI (GenAI) is fundamentally changing the way we interact with technology – and the world. It is the fulcrum that businesses rely on to enhance, empower, and engage employees and customers.”<sup>1</sup>

2024 has seen this AI evolution rapidly expand across many enterprises. In the latest McKinsey Global Survey on AI, 65% of respondents report that their organizations regularly use GenAI. Looking ahead, most respondents – 67 percent – expect their organizations to invest more in AI over the next three years.<sup>2</sup>

A robust AI strategy is now essential for business. As companies move up this adoption curve, they are met with a perennial challenge: data that is incomplete, inaccurate, insecure and therefore untrustworthy. This brings data management to the fore, as you can’t have an effective, compliant AI strategy without reliable data.

GenAI presents companies with the appealing opportunity to generate new business value and compete in dynamic markets more effectively through increased business and operational automation. Innovative companies will realize this opportunity by first tackling the persistent

problems of bottlenecked data pipelines, data quality issues and insufficient data management strategies. They will use GenAI as a forcing function, taking long-needed actions to streamline, observe and control their processes for **managing multi-structured data**.<sup>3</sup>

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**Organizations will need to demonstrate how they are using AI safely and responsibly and be able to easily answer why their AI models have made certain decisions.**

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The onus is on organizations themselves to understand the heritage and lineage of their data inputs, ensure that the data utilized is high quality and illustrate how AI performs to generate a particular outcome.

“Only by taking this approach can they balance AI innovation with compliance,” remarks EMEA Chief Architect Siddharth Rajagopal at Informatica. He also emphasizes the challenges organizations face when integrating advanced AI technology within the frameworks of modern enterprise compliance.

<sup>1</sup> Generative AI Trends For All Facets of Business (forrester.com)

<sup>2</sup> <https://www.mckinsey.com/featured-insights/mckinsey-global-surveys>

<sup>3</sup> How to create generative AI success with governed data management | Informatica

## AI Data Management Needs

The pressure on enterprises globally to use AI for business advantage is accelerating rapidly and that means understanding how this impacts the business in real time to help ensure it adheres to changing regulations. The size, complexity and distributed nature of data, combined with increasing requirements for speed of action, mean the manual data governance and management practices of the past can never keep up with the agile business and legal needs of today.

The underlying technology foundation supporting the execution of the data management strategy requires AI-powered automation to scale. An integrated, cloud-native, modular platform can deliver support to de-risk AI initiatives and enhance compliance with new AI regulations like the EU AI Act.

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**To meet the demands of modern data and AI governance, a data and AI model management solution should scale as the business grows and intelligently automate governance and data management as a flexible, extensible, agile platform.**

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It is clear an innovative, robust solution that can deal with the complexities of managing AI responsibly is essential.

## Data Leader's Checklist

-  **Perform an external gap analysis to understand** what data and AI governance solutions exist.
-  **Perform an external gap analysis to identify** what methods of manual governance are performed today that are unreliable and don't scale.
-  **Identify missing key capabilities**, such as robust security and privacy controls for handling sensitive data.
-  **Establish reliable standards** for data quality and ensure sufficient transparency.
-  **Verify dependable policy enforcement** that aligns with the data strategy for proper data and AI usage.

“Generative AI has the power to be as impactful as some of the most transformative technologies of our time. The mass adoption of generative AI has transformed customer and employee interactions and expectations. As a result, GenAI has catapulted AI initiatives from ‘nice-to-haves’ to the basis for competitive roadmaps.”

**Srividya Sridharan**

VP and Group Research Director at Forrester

Source: **Generative AI Trends For All Facets of Business** ([forrester.com](https://www.forrester.com))



## Part One

# The Landscape of AI Legislation

**As the adoption of generative AI systems explodes across enterprises globally, then regulation must logically follow.**

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**“Generative AI adoption is quickly moving forward, and organizations are figuring out how to comply with regulation. Executives need to proceed with vigilance as regulation around generative AI is built and implemented.”**

**Emily Frolick**

Partner US Trusted Imperative Leader KPMG

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Many countries are examining how best to manage AI regulation and the first region to publish new legislation is Europe.

## The EU AI Act

The European Union Artificial Intelligence Act, also known as the EU AI Act, is a comprehensive legal framework for AI regulation planned by the

European Union (EU).<sup>4</sup> Its aim is to ensure the safety and fundamental rights of citizens and businesses. This Act classifies AI systems based on their associated risks and implements specific rules for each category, fostering the use of AI that is lawful, ethical and robust across the region.

The EU AI Act officially became law on August 1, 2024,<sup>5</sup> setting a global benchmark for AI regulation. The Act is intended to ensure that AI systems are:

- Safe, transparent and traceable
- Non-discriminatory
- Environmentally friendly
- Respectful of existing privacy laws and people’s fundamental rights

The Act establishes rules for creating and using AI in the EU, aiming to foster innovation and curb potentially harmful uses. It states, “The AI Act aims to provide AI developers and deployers with clear requirements and obligations regarding specific uses of AI. At the same time, the regulation seeks to reduce administrative and financial burdens for business, in particular, small and medium-sized enterprises (SMEs).”<sup>6</sup>

<sup>4</sup> <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>

<sup>5</sup> <https://artificialintelligenceact.eu/documents/#:~:text=The%20AI%20Act%20will%20likely,between%20late%202024%20-%20summer%202027.>

<sup>6</sup> <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>

The Act categorizes AI systems based on their risk to rights and safety.<sup>7</sup>  
The Act defines the following:

1. Unacceptable risks, such as social scoring by governments, will be banned.
2. High-risk systems, including those used in critical infrastructures, law enforcement or procedures affecting workers' rights, must comply with strict requirements before deployment. This includes rigorous testing, transparency obligations and the provision of high-quality data sets that avoid discrimination. A prevalent example is real-time remote biometric identification systems, like facial recognition.
3. AI systems deemed low or minimal risk, such as the use of chatbots, will have lighter regulatory burdens; for example, AI-generated text will have to be labeled as such and AI-enabled video games or spam filters will have free use, encouraging innovation, while ensuring that systems are trustworthy.

<sup>7</sup> [https://www.artificial-intelligence-act.com/#:~:text=Artificial%20intelligence%20system%20\(AI,logic%2D%20and%20knowledge%20based%20approaches%2C](https://www.artificial-intelligence-act.com/#:~:text=Artificial%20intelligence%20system%20(AI,logic%2D%20and%20knowledge%20based%20approaches%2C)



## Beyond EU Boundaries

Understanding how to comply with the organizational requirements of the EU AI Act naturally extends to operating in the market with both customers and competitors. As such, the impact of this new legislation will be felt beyond EU boundaries due to the global nature of the digital economy. It states, “The aim of the new rules is to foster trustworthy AI in Europe and beyond by ensuring that AI systems respect fundamental rights, safety and ethical principles and by addressing risks of very powerful and impactful AI models.”<sup>8</sup>

Therefore, the EU AI Act can compel non-EU countries and companies to evaluate and potentially adjust their AI strategies and services if they wish to operate in the EU market. This approach could standardize controls across regions, enabling some organizations to gain a competitive edge by aligning better with regulations and managing international partnerships more harmoniously. These far-reaching implications reaffirm the importance of understanding and engaging with international regulations in an increasingly complex world. (You can read more in the article [here](#)).

## Singapore Model AI Governance Framework

**Model AI Governance Framework for Generative AI:** Singapore has developed a proposed framework for generative AI, which expands on the existing Model Governance Framework that covers traditional AI.

The proposed framework aims to create a trusted environment for AI development globally, emphasizing principles like explainability, transparency and fairness.<sup>9</sup>

Singapore’s AI governance framework emphasizes responsible and ethical AI development. The key principles are:

1. **Transparency, Explainability and Fairness:** Decisions made by AI systems should be transparent, explainable and fair. This ensures that users understand how AI arrives at its conclusions.
2. **Human-Centric Approach:** AI solutions should prioritize human well-being and safety. They should amplify human capabilities rather than replace them.<sup>10</sup>

“Good governance is crucial. With the right guard rails in place, we create conditions to innovate safely, responsibly and for a common purpose. The borderless nature of tech also means this must be a shared endeavor,” said Deputy Prime Minister Heng Swee Keat. Singapore has recognized the global nature of AI innovation in enterprise usage and the need to work together across countries and regions to manage AI regulatory compliance.

The framework identifies nine areas — including accountability, trusted data for AI training and content provenance — where the governance of generative AI can be strengthened.

<sup>8</sup> <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>

<sup>9</sup> <https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2024/public-consult-model-ai-governance-framework-genai>

<sup>10</sup> <https://www.pdpc.gov.sg/help-and-resources/2020/01/model-ai-governance-framework>

## U.S. Executive Order on AI

Biden's "Executive Order on the Safe, Secure and Trustworthy Development and Use of Artificial Intelligence"<sup>11</sup> was published on Oct 30, 2023. It provided U.S. government-authored guidance on eight primary sections:

- New Standards for AI Safety and Security
- Protecting Americans' Privacy
- Advancing Equity and Civil Rights
- Standing Up for Consumers, Patients and Students
- Supporting Workers
- Promoting Innovation and Competition
- Advancing American Leadership Abroad
- Ensuring Responsible and Effective Government Use of AI

The order is an initial step to ensure that AI is trustworthy and helpful. It aims to guide how AI is developed so that companies can profit without jeopardizing public safety. (You can read more about it in an article [here](#).)

## Other Regulations in Focus

In May 2024, the Colorado Artificial Intelligence Act (CAIA) became law in the U.S., making Colorado the first state to enact legislation governing the use of high-risk artificial intelligence systems.

There are seven AI-related bills in the California legislature, demonstrating the growing patchwork of U.S. state AI laws.

Research shows that efforts to regulate AI appear to be growing rapidly. Stanford University's 2023 AI Index shows that 37 AI-related bills were passed into law globally in 2022, with countries such as Canada, India, China and Switzerland all developing AI regulations.<sup>12</sup>

As illustrated here, many countries are in various stages of evolution in regulating AI and have differing views of how best to do it. Consequently, there is no clear consensus on how best to regulate AI either from a global standpoint or consistently, which allows innovation while curtailing potentially harmful uses of AI.

As EMEA Informatica Chief Architect, Siddharth Rajagopal analyzes the global landscape, and he predicts, "We will likely see a divergence in how countries across the globe regulate AI. This could look like different variants of the same regulations that are loosely based on the EU AI Act. But large, multi-national organizations will not be able to afford to do AI regulation on a siloed project-by-project, country-by-country basis. It is too complex." Rajagopal further emphasizes the need for a strategic approach, stating, "Instead, they will need to consider how AI regulation translates into policy and put solid foundations in place that can be easily adapted for individual regions. For example, regulators across countries are showing an appetite for transparency."

<sup>11</sup> <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/>

<sup>12</sup> <https://hai.stanford.edu/news/2023-state-ai-14-charts>

# Data Leader's Checklist



**Review and understand scope**, implications and requirements for navigating the latest AI regulations, such as the EU AI Act, with key stakeholders across the enterprise. Based on their understanding, senior leadership must define clear objectives for compliance that align with both the legal requirements and the company's strategic goals. This could include adjusting current AI systems, defining new AI data governance structures or implementing specific data protection measures.



**Develop a detailed risk management framework** that addresses the specific exposure associated with unreliable AI and data management practices or unknowns (e.g., user access rights).



**Establish and communicate clear data and AI policies** regarding data usage, AI model deployment and regulatory compliance.



## Part Two

# Challenges in AI Governance

Many companies today have inefficient data management processes that result from disorganized pipelines, inadequate data observability and a lack of governance controls. These perennial problems can make generative AI outputs unfit for use, which could lead to poor decisions, frustrated customers and significant policy compliance violations.

The growing number of countries and regions enforcing new AI regulations demonstrates that CDOs must understand how to comply with an array of new laws across relevant territories where they do business. This could be a bewildering checklist of risk management challenges for international organizations operating across borders. As such, the evolving nature of generative AI means that businesses must stay abreast of relevant laws and regulations, including AI compliance laws as well as intellectual property rights and data protection, to ensure compliance and mitigate legal risks. Robust data governance that ensures the availability and security of high-quality, reliable data throughout the enterprise is essential.

This complex scenario illustrates some of the crucial pillars of modern data governance, including managing data and AI risk and compliance, data quality and observability, data sharing and democratization, and cataloging and lineage for integration and transparency.

Let's take a closer look at these capabilities and how they support modern data governance.



## Data Integration

Navigating responsible data and AI governance requires a modern approach supported by a cloud data management platform.

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**Among data leaders implementing or planning to implement generative AI, a recent Informatica CDO Insights 2024 Survey reveals, the quality of data (42%) is the top data-related obstacle to the adoption of generative AI and large language models (LLMs). And data sources are expanding as well: 41% admit they're juggling 1,000 or more data sources — a number 79% expect to increase during 2024.<sup>13</sup>**

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The disparate nature of data sources in use in modern technology networks means that data could be spread across silos due to legacy, fragmented data governance technologies that require significant manual intervention and hinder the company's ability to fuel AI initiatives with trusted data. Moreover, embracing AI requires shifting from legacy on-premises data governance systems towards an agile, scalable and cost-effective cloud-native solution to keep up with growing data demand.

<sup>13</sup> CDO Insights 2024: Charting a Course to AI Readiness

<sup>14</sup> <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-data-dividend-fueling-generative-ai>

## Data Quality and Observability

"Data quality has always been an important issue for CDOs," observed McKinsey in The data dividend: Fueling generative AI, 2023. "But the scale and scope of data that generative AI models rely on has made the 'garbage in/garbage out' truism much more consequential and expensive, as training a single LLM can cost millions of dollars."<sup>14</sup>

There are two core challenges to ensuring high data quality: extending data observability programs for generative AI applications to better spot quality issues, such as by setting minimum thresholds for unstructured content to be included in generative AI applications; and developing interventions across the data life cycle to fix issues.

Moreover, AI can produce inconsistent, inaccurate and even biased outputs without a robust data governance framework to confidently deliver data to:

- Maintain data quality and provide clean, consistent and accurate datasets, and in turn, reduce noise, improve model accuracy and support sound decision-making.
- Safeguard data exposure by aligning data usage with data protection standards and managing data access as appropriate to the AI use case.
- Provide transparency and explainability into how AI models use data to build trust among users and hold entities accountable for AI outcomes.

## Data Bias

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**“The danger with AI is that it is designed to work at scale, making huge numbers of predictions based on vast amounts of data. Because of this, the effect of just a small amount of bias present in either the data or the algorithms can quickly be magnified exponentially.”<sup>15</sup>**

**Bernard Marr**

Futurist Author, Keynote Speaker and Strategic Business Advisor

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32% of CDOs in our Informatica “CDO Insights 2024: Charting a Course to AI Readiness” survey saw bias as a top challenge in adopting or planning to adopt GenAI technology.<sup>16</sup>

Bias can come in different forms, such as:

1. Statistical bias, which includes data and algorithmic bias.
2. Societal bias, which encompasses human and business bias that could be codified into business policies. Such biases can have severe implications. Training AI systems on incomplete or biased data can lead to incorrect patterns and, in turn, make incorrect predictions or develop hallucinations — where AI systems generate false or distorted outputs — resulting in incorrect or misleading results.

<sup>15</sup> <https://bernardmarr.com/building-responsible-ai-how-to-combat-bias-and-promote-equity/>

<sup>16</sup> CDO Insights 2024: Charting a Course to AI Readiness

<sup>17</sup> Ibid.

<sup>18</sup> Ibid.

This leads to ethical considerations of how to manage data responsibly, ensuring data is handled according to defined ethical factors such as transparency, fairness and bias when applying data management policies for appropriate use.

## Data Privacy

Data leaders surveyed in our CDO Insights 2024 survey are seeing roadblocks in AI governance. A notable 35% revealed ‘The inability to minimize risks related to industry regulations and compliance laws,’<sup>17</sup> which could be complicating their frustration with their inability to manage access to private and sensitive data (33%).<sup>18</sup> Moreover, 45% saw data privacy and protection as a top data management investment priority.

The lack of oversight in data privacy and protection can pose a more significant challenge and lead to a loss of trust in AI adoption, for example, when using personally identifiable information (PII) inappropriately.

Enabling security controls while allowing data access for various qualified teams and roles is a critical challenge in AI and data management, especially for maintaining compliance with security policies. It's important to clarify data ownership and establish rights for proper data use. Data should be managed with a clear understanding of who owns or produces it, and how it should be used appropriately. It's crucial to provide data only to those who need it and are aligned to the data strategy, while respecting data ownership and use policies.

## Chart the Course for Responsible AI Governance

AI offers tremendous promise for data management potential, but aligning an entire organization behind it will become increasingly difficult as data leaders contend with multiple priorities as well as multiple roadblocks.

The need for a single consolidated solution to manage all this data becomes abundantly clear. Relying on existing staff to upskill or reskill to manage AI, as 48% of data leaders from the CDO Insights 2024 survey<sup>19</sup> would consider, can allow them to make strides in achieving their AI and data goals — but that won't be enough without providing these employees with the proper technology.

### Data Leader's Checklist



**Audit existing data management practices** by regularly reviewing and refining data management processes to eliminate inefficiencies and disorganized data pipelines.



**Upskill employees and provide data literacy programs.** Consider rolling out continuous education focusing on AI and data literacy for relevant staff. (You can read more about how Informatica supports data literacy programs [here](#)).



**Develop training programs** on bias mitigation and data ethics for employees.

<sup>19</sup> CDO Insights 2024: Charting a Course to AI Readiness



## Part Three

# Principles of Responsible AI

Ethical frameworks are crucial to understand in order to guide AI development and deployment. Principles of responsible AI, listed below, provide some guidelines to explain what it means from our perspective. This foundation is vital for building sustainable AI practices that are compliant and meet societal expectations.

Here is a brief overview of each one:

### Fairness and Bias Mitigation

**Fairness:** AI systems should provide equitable outcomes for all users, regardless of their background or demographics. It's about treating all groups fairly and embedding ethical considerations in AI systems.

**Bias Mitigation:** Efforts must be made to detect and reduce or eliminate biases in AI systems that can lead to unfair treatment of individuals or groups. Have we removed personally identifiable information (PII) and followed all regulations? Are we transparent, and can we prove the lineage of the data the model uses? Can we document and be ready to show regulators or investigators that the data has no bias?

### Transparency and Explainability

**Transparency** involves the processes by which AI systems are designed and deployed, which includes clear disclosure about AI's decision processes and capabilities. Organizations must discover and catalog their most relevant data and metadata to certify the relevance, value and security and to ensure transparency.

**Explainability** is the ability of AI systems to detail, in an understandable way, the processes and factors they use to make a decision. Organizations must address the challenge of making AI techniques more explainable and transparent. This helps build trust and supports human oversight.

## Privacy and Data Protection

**Privacy** requires ensuring that personal information is kept secure and is only used in ways to which people have agreed. This means that organizations can detect data misuse, protect sensitive data and demonstrate that appropriate controls are maintained.

**Data Protection** entails the legal and secure handling of data. It focuses on compliance to protect individuals' data from unauthorized access and breaches, and ensures policies are documented and enforced to comply with privacy laws and regulations.

## Accountability and Governance

**Accountability** means that the developers, operators and deployers of AI systems are responsible for the consequences of their operation, regardless of AI's autonomous capabilities. Being able to define and assign ownership of policies ensures accountability. When these policies can be broken into rules, then data quality measurement and reporting processes can be automated in the organization.

**Governance** establishes the frameworks, policies and standards to manage AI development and deployment responsibly, focusing on ensuring compliance with ethical and legal standards. Data needs to be processed and made usable, trustworthy and democratized for use across the organization, while adhering to governance policies. This should be flexible and adaptable to changing circumstances.

## Safety and Security

**Safety** involves designing and implementing systems that reliably handle data without errors that could lead to harmful decisions. This requires robust testing and validation to identify and mitigate potential risks associated with data handling, processing and decision-making. Moreover, safety protocols ensure that AI systems are resilient against data corruption, unauthorized access and other vulnerabilities that could impair their functionality or compromise data integrity.

**Security** entails protecting AI systems from malicious attacks and ensures that they are reliable and resilient in the face of attempts to tamper with or manipulate their operation. It also aligns security controls with governance policies for enhanced protection.

## Societal Impact

**Concerns** include understanding and managing the broad effects of AI technology on society, such as ethical standards, societal benefit and avoiding potential negative consequences on social structures.

These principles help guide the creation and usage of AI technologies that are beneficial for all stakeholders involved and are supportive of general societal standards and values. They are at the center of building effective, robust data governance strategies and employing AI systems that have been developed with the same goals (which we will discuss further in the section on "Informatica's AI Development Principles" for product strategy).

# Data Leader's Checklist



**Oversee the implementation** of fairness, transparency and accountability measures.



**Enforce privacy and data protection** principles across the organization.



**Regularly audit and update governance frameworks** to ensure compliance and societal impact considerations. (You can read more about Informatica governance frameworks [here](#).)



**Promote a culture of data-driven decision-making**, continuous learning and adaptation to AI-driven technologies.



## Part Four

# Informatica Intelligent Data Management Cloud

**A comprehensive data management platform that transforms vast and complex enterprise data into actionable business value and enables effective AI compliance.**

Informatica's vision for data management is one of unification and empowerment. It encompasses a foundation enabling self-serve access to valid, trustworthy data, with AI-infused tools amplifying productivity and enriching user experiences.<sup>20</sup> **Informatica Intelligent Data Management Cloud™** (IDMC) plays a central role in de-risking AI initiatives and enhancing compliance with regulations such as the EU AI Act. As shown in Figure 1, the comprehensive solution offers data governance with privacy controls, data quality improvement and AI-powered data cataloging to ensure the transparency, reliability and integrity of data. This is all done through a data management platform that is multi-vendor, multi-cloud (including AWS, Azure and Google) and hybrid, supporting on-premises and cloud-based data storage and management. Through automated data management tasks and seamless data integration, IDMC increases operational efficiency and creates a single source of truth.

<sup>20</sup> **Designing a Principled Product Strategy for AI-Powered Data Management**

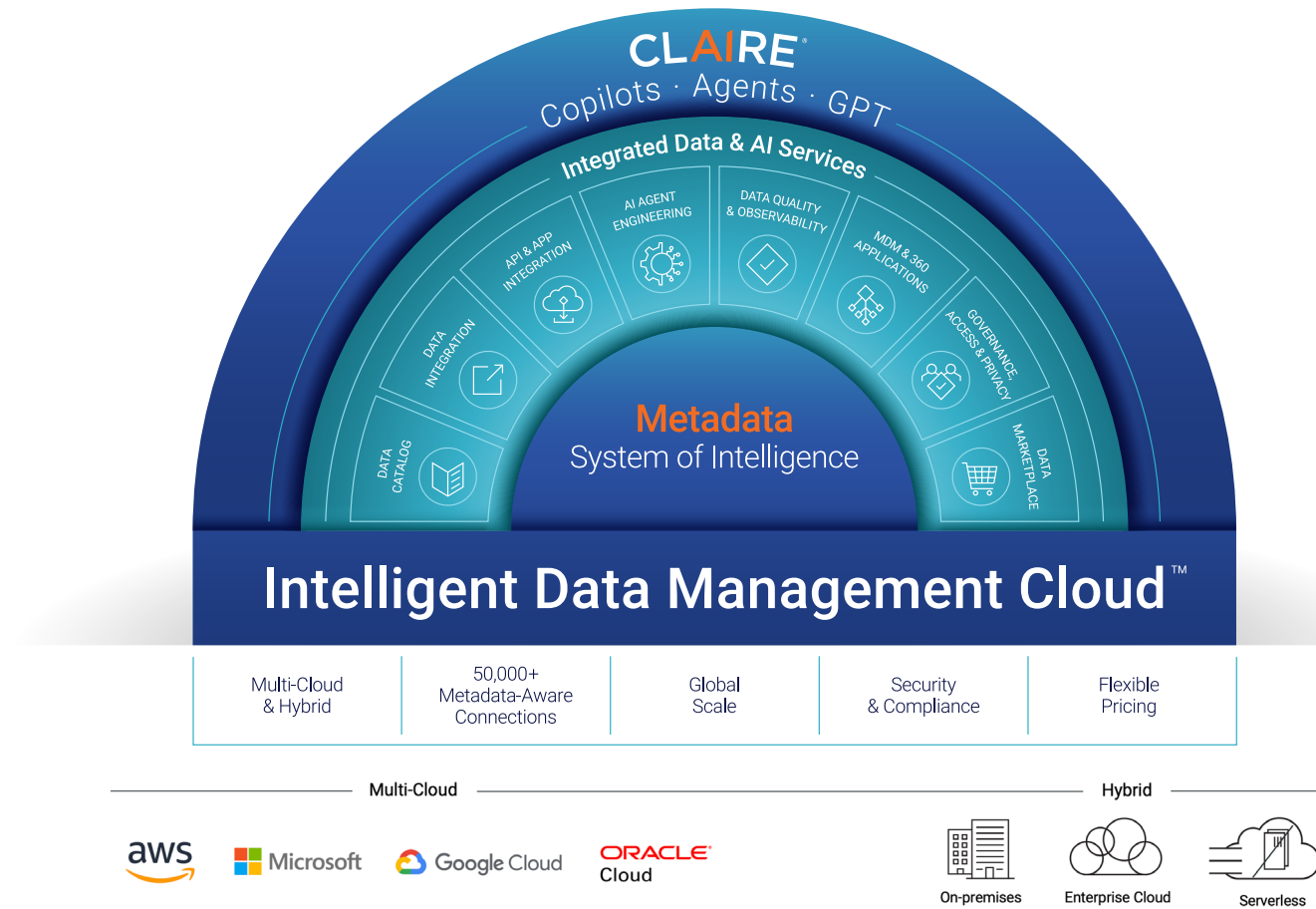


Figure 1: Intelligent Data Management Cloud (IDMC) delivers what you need to achieve better business outcomes, all in one place.

Leveraging **CLAIRE®**, Informatica's unified metadata intelligence, introduces a natural language (NL)-based experience to IDMC. This dramatically simplifies tasks such as data discovery, integration, quality, governance and master data management. The Informatica CLAIRE GPT, a generative AI-powered version of our pioneering AI engine CLAIRE, will enhance data management and data utilization experience for all users. This rapidly improves a company's time-to-value and amplifies business insights. Search and discover data assets are available in the data catalog through a natural language interface powered by Informatica's large language model (LLM). CLAIRE GPT helps simplify, accelerate and optimize data management operations, driving enormous gains in productivity for data teams.

## How IDMC Supports Responsible AI Governance

Key benefits include:

### Empower Data Users and Reduce Data Management Costs

CLAIRE GPT is a simple and easy-to-use interface. It allows more business or citizen users to perform data management tasks without specialized knowledge, thus reducing the barrier to entry.

### Increase Productivity Across the Organization

Improve quality and transparency of data by automating repetitive tasks such as debugging, testing, refactoring and documentation. CLAIRE GPT helps data engineers quickly explore the datasets and find data quality issues. It also helps document and test the pipeline.

### Streamline Data Pipeline Creation With Fully Automated Workflows

CLAIRE GPT helps find the right datasets needed for the task directly from requirement specifications and generates the first draft of the data pipeline. CLAIRE GPT can create data mappings, data quality rules and governance artifacts, thus allowing the data team to refine them easily.

These features enhance an already powerful Data Catalog as part of IDMC. By harnessing CLAIRE's advanced machine learning and AI capabilities, Data Catalog effectively ensures that data across the enterprise is consistently managed and compliant with relevant regulations. Customers can automate the linkage of governance policies directly to their enterprise data, ensuring that compliance (managing relevant AI regulations) and best practices are embedded throughout their data management processes (as illustrated in Figure 2 on the next page).

## Chart the Course for Responsible AI Governance

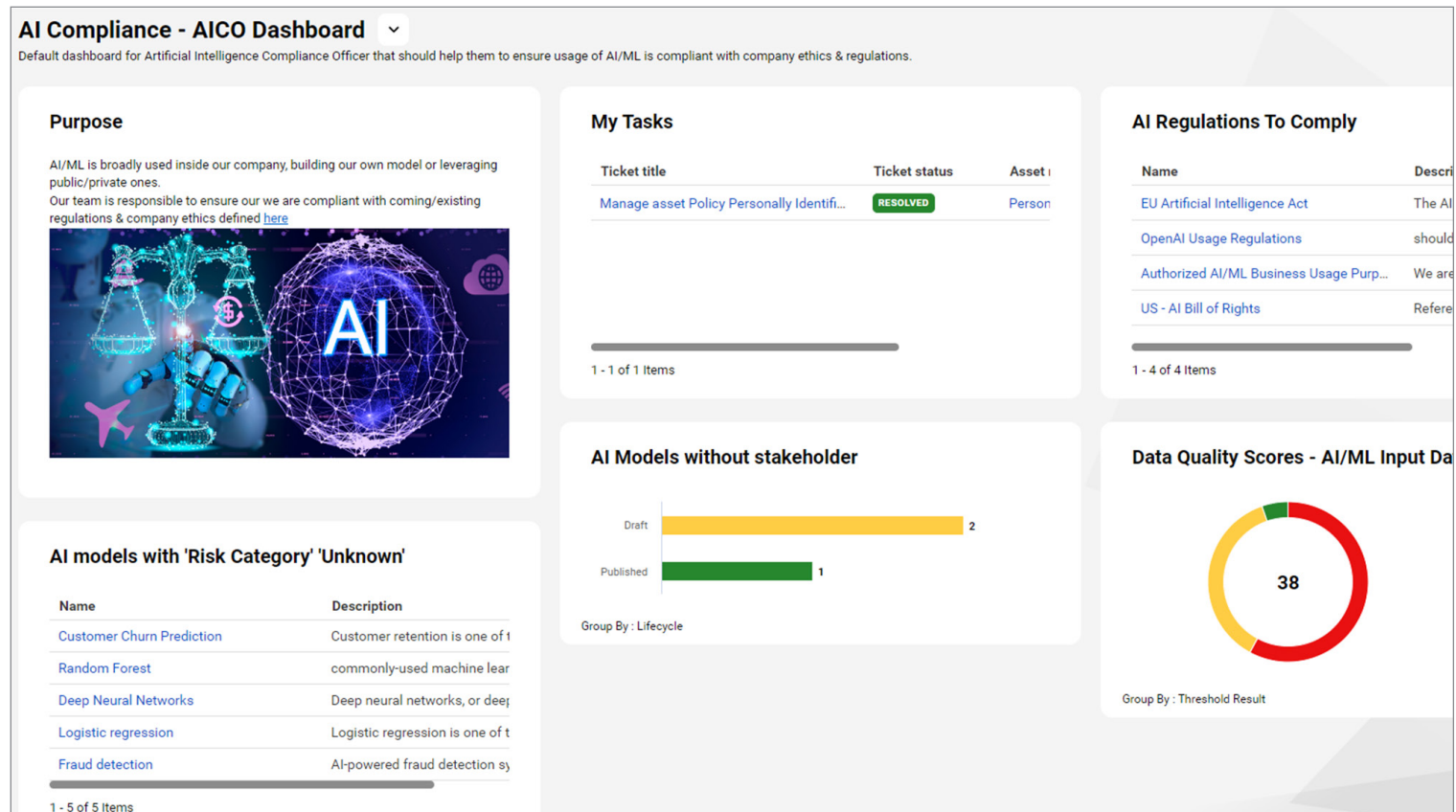


Figure 2: Example of an AI compliance dashboard from the Informatica **Cloud Data Governance and Catalog**, illustrating the management of AI regulations.

This capability streamlines governance and enhances operational efficiency, allowing organizations to maintain a high standard of data integrity and security without manual oversight. Organizations must have full trust and confidence in the applications they employ and be able to trace the automation of data usage and governance from source to output.

# Informatica's AI Development Principles

The development of the Intelligent Data Management Cloud incorporates AI, such as the CLAIRE engine, to automate processes and enable predictive insights. Adhering to a stringent set of principles enhances platform reliability at scale. These principles are designed to ensure that what is created and deployed using IDMC for AI is developed and used in a way that respects human rights, contributes to societal benefits, upholds privacy and security and prioritizes transparency and understandability. They also strive for inclusivity and diversity.

These principles include:

- **Enhancing human productivity in data management:** We aim to develop AI technologies for data management, making it easy for data teams and business users to manage their data effectively. By narrowing our focus, we aspire to deliver impactful solutions while tailoring our technologies to the unique needs and challenges within this area.
- **Ensuring data security and accountability:** We pledge to create AI technologies that prioritize data privacy and security and balance them against the functionality of our product features. AI development oversight will include third-party audits, robust feedback mechanisms and a dedicated oversight team. We will maintain documentary evidence of how our AI was trained. This will help to ensure transparency in our processes and trust in our operations.
- **Providing transparency and understandability:** We aim to create AI models that are effective and understandable. We will leverage advanced interpretability frameworks and tools to provide insights into how our models make decisions, allowing users to understand, where appropriate, how our AI application reached its conclusions.
- **Designing delightful user experiences:** We aim to harness AI to augment human productivity by crafting thoughtfully designed user experiences that delight end users.
- **Democratizing AI responsibly:** We commit to making AI accessible to a broad range of users while maintaining a strong focus on ethical and privacy considerations. We will balance openness with robust control mechanisms designed to prevent misuse of technology and protect data privacy.

(You can read more about Informatica's vision in this blog article, "[Designing a Principled Product Strategy for AI-Powered Data Management.](#)")

“Data cannot be an afterthought in generative AI. Rather, it is the core fuel that powers the ability of a business to capture value from generative AI.”<sup>21</sup>

McKinsey, The data dividend: Fueling generative AI



<sup>21</sup> <https://www.mckinsey.com/~/media/mckinsey/business%20functions/mckinsey%20digital/our%20insights/the%20data%20dividend%20fueling%20generative%20ai/the-data-dividend-fueling-generative-ai.pdf?shouldIndex=false>

# Data Leader's Checklist



**Conduct a high-level assessment** of current data governance capabilities and identify gaps that can be addressed by an advanced solution like IDMC.



**Develop a detailed strategy** that incorporates AI capabilities to manage, discover and govern data. This strategy should align with overall business objectives and technological landscapes.



**Prepare a change management plan** to address potential human and process modifications.



## Success Stories

# Driving Better Business Outcomes Through Responsible AI Governance

**Informatica has worked with customers worldwide to help them make better business decisions through responsible AI-powered data governance. These two examples from the healthcare and telecom industries demonstrate our longstanding commitment to strategic partnerships that deliver through technological advances.**

### **Biopharma's Swift AI Compliance Upgrade**

A multinational pharmaceutical and healthcare company wanted to realize their vision of using AI to develop and market new drugs more quickly, optimize their product portfolio and become the first biopharma company to implement responsible AI on a large scale.

#### **Challenges:**

The organization faced a complex data and AI environment with over 150 disparate

data models, leading to significant compliance challenges. Limited visibility into the origins and consumption of data increases the risk of compliance oversight and undermines the reliability of business reporting. Non-compliance with data privacy regulations, such as GDPR and HIPAA, could result in substantial fines and damage to the company's reputation. Additionally, fragmented tools and varying technologies across departments have led to inconsistent data management processes, further elevating the exposure to compliance risks.

#### **Solution:**

By leveraging the capabilities of Informatica Intelligent Data Management Cloud, Biopharma now has a unified and accurate view of data across the organization, enabling a connected data landscape that supports the delivery of trusted, high-quality and compliant data to AI applications. Integrated AI-powered data management capabilities have allowed

the company to transition to a modern data mesh architecture. This architecture features near real-time data availability for analysis and advanced analytics, achieved through standardized, governed and automated data flows.

#### **Outcomes:**

The organization has significantly accelerated its generation of insights through the easier availability of trustworthy, safe and secure data. Robust compliance measures have enhanced the integrity and reliability of this data, improving the accuracy of AI-generated insights. Additionally, AI-driven automation has bolstered the organization's capacity to govern disparate data effectively and adapt quickly to changing AI regulations, all while reducing technology costs.



## AI-Driven Data Unification in Telecom

A leading European multinational telecommunication company faced a growing need to integrate diverse data sources from various regions to responsibly cater to different stakeholders and use cases. The primary goal is to leverage data as a strategic asset across the enterprise to enhance business outcomes.

### Challenges:

Navigating a vast and intricate data environment, characterized by over 1000 enterprise applications, the organization had a critical need to govern diverse data spanning enterprise networks and partners. The company struggles with a scarcity of reliable, reusable data assets that can support cross-functional use cases. Additionally,

multiple governance standards across different geographies and business entities contribute to operational inefficiencies. The company also faced continuous and escalating contractual and regulatory demands concerning the use of data and AI, adding further complexity to its challenges.

### Solution:

To address its data challenges, the organization partnered with Informatica to implement a federated data governance model. This model adheres to the FAIR principles, ensuring that data products are findable, accessible, interoperable and reusable. Informatica's solutions have empowered the company to democratize high-quality, governed and secure data products, making them globally accessible

to partners and customers. Additionally, Informatica has facilitated timely access to high-quality, cross-functional data, significantly accelerating the transformation of the end-to-end customer journey.

### Outcomes:

The implementation of Informatica's solutions has led to readily available and trusted data, drastically reducing the time to realize business value. This enhancement in data accessibility and reliability has also strengthened the organization's adherence to contractual and regulatory compliance requirements, solidifying its standing in a competitive and fast-evolving telecommunications industry.



# Conclusion

It is evident that using AI effectively requires a strategic approach to data governance coupled with compliance for evolving global regulations. According to Informatica's CDO Insights 2024 Survey, the top data strategy priorities for 2024 include delivering reliable and consistent data fit for generative AI (39%), improving data-driven culture and data literacy (39%) and improving governance over data and data processes (38%).<sup>22</sup> These priorities all highlight the need to push beyond implementing and toward maximizing AI's efficacy and making the most of an organization's investments.

In summary, there are several key takeaways from this analysis:

1. **Data and AI Governance for Regulatory Compliance** – Have controls in place to map data strategy to mandates for appropriate use policies, such as the new regulations like the EU AI Act. Staying ahead in regulatory compliance is crucial for enterprises to leverage new market opportunities without falling foul of regulatory non-compliance, poor business decision-making, a tarnished reputation and loss of customer trust.
2. **Data Quality and Observability** – Enhance the reliable performance of data fueling GenAI and other applications such as analytics, by providing transparency and explainability into how AI models use data. This approach builds trust among users and holds entities accountable for AI outcomes.

3. **Appropriate Data Sharing** – Enable responsible data and AI usage with controls that align owners and producers to data and AI consumption. This involves adopting data management practices that are transparent, fair and accountable, which are crucial for maintaining public trust and meeting regulatory standards.

**By leveraging the checklist in each section of this eBook, organizations can examine their readiness to adopt AI technologies across the business. These technologies support the delivery of effective data governance using high-quality, compliant and managed data.**

As AI and data management continue to advance, data leaders must recognize that they both go hand in hand, complementing each other to drive innovation. By harnessing their power collectively, leaders can revolutionize their strategies and pave the way for transformative progress within their organizations.

<sup>22</sup> [https://www.informatica.com/lp/cdo-insights-2024-charting-a-course-to-ai-readiness\\_4656.html](https://www.informatica.com/lp/cdo-insights-2024-charting-a-course-to-ai-readiness_4656.html)

## Further Resources



Why AI-Powered Data Governance Helps  
Businesses Scale | Informatica

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GenAI Performance | Informatica

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# About Us

Informatica (NYSE: INFA), a leader in enterprise AI-powered cloud data management, brings data and AI to life by empowering businesses to realize the transformative power of their most critical assets. We have created a new category of software, the Informatica Intelligent Data Management Cloud™ (IDMC), powered by AI and an end-to-end data management platform that connects, manages and unifies data across virtually any multi-cloud, hybrid system, democratizing data and enabling enterprises to modernize their business strategies. Customers in approximately 100 countries and more than 80 of the Fortune 100 rely on Informatica to drive data-led digital transformation.

**Informatica. Where data and AI come to life.™**

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