THE AI TSUNAMI

Why strong data governance is your **best life raft**

WHITEPAPER

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Strengthening Data Governance to Help
Businesses Ride the Wave *(Not Drown in It)*

International regulations regarding AI, data privacy, and data management are rapidly evolving within a geopolitical climate that has introduced significant uncertainty. To remain competitive, compliant, and recognized as a leader in any industry, it is essential to ensure that data, whether AI-generated or not, is of high quality and trustworthy. This assurance is crucial for instilling confidence in clients and employees amidst an increasingly unpredictable and unstable world.

AI is now a part of businesses, whether executives are ready or not. A January 2025 McKinsey & Company report, with data from Fall 2024, shows a gap in perception between C-suite and employees. While only 4% of executives think employees use generative AI for over 30% of their tasks, 13% of employees say they already do. Furthermore, 47% of employees expect this usage to reach 30% or more within a year, compared to just 20% of executives[1]

Safe and ethical AI implementation is built on robust data governance programs. Businesses are faced with not only catching up to govern vast amounts of data from both legacy and new systems but contending with the wave of new data being generated daily. While the value of data governance is recognized, creating effective programs is complex, involving significant leadership dedication to continuous improvement and coordination of change management in people, processes, and technology to achieve lasting results.

AI has significant potential to produce positive change for business operations, but this comes with considerable risk if not properly managed. The 'intelligence' in AI does not develop on its own; it relies on making predictions based on extensive training using large amounts of data. While it may seem effective to simply provide an AI model with vast quantities of data to enhance accuracy, this approach often does not yield the expected results. Accurate and trustworthy output from AI models is directly linked to the input of high-quality and well governed data. Anything less can have a substantial negative and potentially harmful impacts ranging from discriminative AI recruitment tools[2] to unsafe cancer treatment recommendations[3] to deadly crashes involving self-driving cars[4].

So, how do you ride the wave of AI without drowning? You put on scuba gear called robust data governance and ensure your scuba instructor (a.k.a. the person in charge of data governance for your business) is properly trained both in traditional and AI governance!

The Role of Data Governance in Enhancing AI Performance

Effective data governance is crucial for optimizing the performance of your AI systems. It ensures the quality and consistency of organizational data, clearly defines managerial roles and responsibilities, guarantees compliance with regulatory and legal standards, mitigates security risks from both internal and external threats, and supports scalability as the data estate expands. Without proper governance, data poses significant risks to an organization. However, with robust data governance, it becomes a valuable asset, providing the essential foundation for AI to function efficiently and effectively.
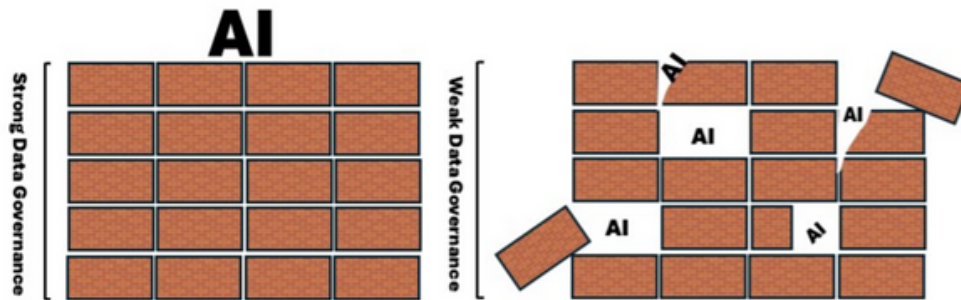
Avoiding "Garbage in, Garbage out" in AI

You've likely heard the expression "garbage in, garbage out". As a principle, it specifically encompasses the idea that flawed input data will lead to flawed output. That is just as true with AI. A data governance program's data quality initiatives focus on maintaining accuracy, completeness, consistency and reliability of data over time.

Emphasizing data quality supports the development of reliable AI models. By understanding the intended use, definitions, and limitations of data sets before they are used to train AI models, one can identify where additional data may be needed to adjust for known limitations. Transparency and certainty regarding data quality can help identify and avoid potential negative consequences which result in not only unreliable outputs, but a significant damage to a business's reputation and trust and missed opportunities to grow business hampered by the requirement for extensive data cleaning.

In 2021, the advertising platform Kargo learned a $500,000USD lesson on the importance of closely monitoring data quality. Receiving incorrect information for data processing from an external partner resulted in a main pipeline failure. The answer? Improve data observability so that those who can fix a potential issue are alerted in real-time.[5]

The Regulatory Evolution: AI Data Governance Prepares for Compliance

AI regulations are rapidly evolving internationally with the European Union (EU) considered to be the most advanced with the June 2024 EU Artificial Intelligence Act (AI Act). Canada has yet to pass mandatory AI regulations, but nonetheless is heavily involved in multiple initiatives to advance the safe design, development and deployment of AI including the domestic Artificial Intelligence and Data Act (AIDA)[6] voluntary code of conduct, the Global Partnership on Artificial Intelligence (GPAI)[7], the European Union Digital Partnership (EUDP)[8], and most recently in February 2025 the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law[9].

A data governance program supporting a business's AI initiatives identifies both existing and upcoming regulations to ensure compliance and avoid penalties. Data governance is achieved through policies and standards for business data, including AI-generated data, which address data security, privacy, retention, and auditing in clear and specific terms. It also acknowledges the need for expertise in change management through the implementation, maintenance, and revision of governance policies and standards.

Data governance is fundamentally due diligence, and when the responsibility to take reasonable steps to avoid harm, make informed decisions, and mitigate risks fall short, the financial penalties can be significant.

Just in the last quarter of 2024 alone ClearviewAI[10], OpenAI[11], and DoNotPay[12] incurred fines totaling nearly €50 million for failing to comply with existing regulatory requirements.

Under the EU AI Act which began enforcement in August 2024, penalties can range from €15 million to €35 million or between 3% and 7% of their global annual turnover, whichever is higher.[13]

The Way Forward: Data Governance is
Not Solely a Software Solution

When you search for 'data governance' online, you will encounter a plethora of software solutions claiming to address your governance challenges. While such data infrastructure and monitoring programs are indeed pivotal components of a comprehensive governance strategy, it is crucial to underscore that effective data and AI governance fundamentally depends on human involvement. Data governance professionals are essential not only in configuring these software tools to align with specific business needs but also in understanding how to leverage them effectively to address data quality, privacy, security, and retention concerns. Additionally, they must ensure the optimal use of automation without compromising the necessary observability throughout the data lifecycle.

As stated earlier, data governance is at its essence an exercise in continuous improvement and strong change management, especially as the data landscape in which we all work is changing so dramatically and at such an unprecedented pace. Before you jump into AI in your business with both feet consider this approach:

01. Acknowledge that data governance and AI implementation are intrinsically linked together.

02. Source knowledgeable data governance analysts who have innovative ideas and in-depth knowledge about the current state of the regulatory environment in which AI and data live.

03. Get a clear understanding of your data landscape and data governance maturity before embarking into AI (or embarking into it further).

04. Leverage governance software tools to monitor data and AI interactions proactively.

05. Find or develop an expertise in change management as it relates to data.

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