IBM

The path to data veracity

How to build a trusted analytics foundation

Can you trust your data?

As the information age matures, data has become the most powerful resource enterprises have at their disposal. Businesses have embraced digital transformation, often staking their reputations on insights extracted from collected data. While decision-makers home in on hot topics like AI and the potential of data to drive businesses into the future, many underestimate the pitfalls of poor data governance. If business decision-makers can't trust the data within their organization, how can stakeholders and customers know they are in good hands? Information that is not correctly distributed, or abandoned on an isolated IT island can prove harmful to the integrity of business decisions.

In search of instant analytical insights, businesses often prioritize data access and analysis over governance. However, without ensuring the data is trustworthy and consistent, leaders cannot be confident their decisions are rooted in facts and reality.

80%
of every big data and analytics project is spent **finding, cleansing, understanding and integrating data.**[1]

Key insights
- Can you trust your data?
- Shield your business with data awareness and governance strategy.
- Data governance for competitive advantage.

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For example, imagine a large retail chain months before the start of the holiday shopping season. The retailer's inventory system and database of in-store and online transactions are vital to the business in countless ways, such as determining buying quantities to manage inventory tightly. This keeps the store from leaning on discounts which decrease profits. Additionally, the retailer is aggregating data from sources like social media, input forms and transactions. This data must be organized properly to run important, exclusive buying promotions for top customers through CRM and re-targeting.

Despite the efforts of an overworked IT department, this retailer lacks effective data organization. They have access to the latest analytics tools, but they are not working with reliable data, and therefore cannot trust the insights derived. In addition, although the retailer has plenty of data, between legacy sets of product IDs, store card data and inaccurate, mislabeled personal data, the retailer goes into their most important season with uncertainty.

Due to this uncertainty, digital teams, in-store associates and call center operators won't have the right information to offer the best customer experience. Shoppers will encounter poorly stocked shelves and repetitive marketing communications, leaving many disgruntled. Unhappy customers and millions lost in revenue, all due to lack of data precision.

Beyond missed opportunities, the retailer hasn't estimated the risk of uncertainty about their data's location. The amount of people with access to personally identifiable information needs to be regulated and controlled to keep everyone safe from potential data theft and fraud.

This type of scenario affects companies across many industries. In contrast to the retailer, any insights-driven company depends on trusted data. Working with inaccurate and untrusted data can be worse than having no data at all. While some risks are readily apparent, others remain below the surface. Many businesses leaders struggle to identify the core challenges preventing them from saving money, reducing risk and driving value.

As data requirements and regulations grow even more complex, organizations must be prepared to know where all of their data lives, where it's been, where it's going and who's interacted with it along the way at a moment's notice.

Many businesses mistake good data security for good data governance. While it's true they are linked, each requires its own attention. To stay ahead of competition and upcoming regulation, companies need a solid plan for both.

Shield your business with data awareness and governance strategy.

Businesses want to put data at the center of their decision-making processes to minimize missteps and maximize their competitive advantage. The three keys to building the ideal data governance strategy are:

1. Unite data silos so your organization has the full picture

2. Build a catalog for faster access

3. Prepare for the ever-evolving data landscape

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Unite data silos so your organization has the full picture

Data sources are increasing exponentially. With the growth of both social and IoT data, and the progression of digital channels, there is no shortage of unique data types to provide insights to enterprises. The issue is, those unique sources are often funneled through different segments of the business, with each representing just a small portion of a unique buyer profile. Putting these individual pieces together requires connecting data from multiple sources across the business.

However, more data in a single location isn't always better. Dumping too many types of heterogeneous information into a single location can muddy the waters and hide truly game-changing insights. For the data to be meaningful, you need access to the right dataset.

Organizations that want to put data at the heart of their operations utilize data lakes and warehouses to house both structured and unstructured data. As a company establishes and maintains these repositories, governance should be top of mind. A governed data lake, for instance, embeds data integration, data quality and accessibility. It helps businesses ensure all data is credible, trusted and in the right place.

A fully integrated and governed platform can help your business organize data and derive maximize value.

Learn more about IBM Cloud Private for Data

Build a catalog for faster access

Creating a 'single source of truth' is just the first step to building a lasting advantage. When you have data in a simplified landscape, you still need to know where to look for critical information.

Think of these data repositories as libraries. They could be stocked with thousands of individual pieces of information (books), but without the right cataloguing system users and automated systems would never know where to look. The cataloging system keeps you from becoming overwhelmed and allows you to easily track down the information you're looking for.

Too often businesses fall short in achieving this level of organization.

$600B
Data quality problems cost U.S. businesses **$600 billion annually,** according to the Data Warehousing Institute.[2]

One way to support cataloging and successful data queries is through Enterprise Data Warehouse (EDW) offloading. For some multinational companies and highly fragmented organizations, data hoarding can become a problem. In these cases, EDW democratizes access to important enterprise data. These solutions support improved regulatory compliance across the enterprise, while increasing efficiencies. By offloading data integration workloads, analytical query workloads, and unused, duplicate or inaccurate data sets, EDW offloading can be a valuable part of your data governance strategy.

Prepare for the ever-evolving data landscape

More Chief Data Officers are being charged with finding new revenue streams for data. This means they're responsible for pinpointing both better management of data, and focusing more on quality assurance.

The technology, regulations and compliance requirements of today's data landscape are constantly evolving. It is even more complex for businesses that operate in multiple countries, work in highly regulated industries or do business with multiple data partners across multiple cloud environments. While building your data governance strategy, it's important to plan and be flexible for tomorrow's technologies and potential regulations.

Go beyond compliance to gain competitive advantage. The future is bright for companies that give their clients peace of mind and transparency surrounding the use of their data. With everything AI brings to businesses, consumers still demand an opt-out button. Ensuring compliance instills trust – leading to new revenue opportunities and reductions in risk of litigation and unethical use.

Why it's time to offload your enterprise data warehouse

Learn how to go beyond compliance to gain an advantage

Data governance for competitive advantage.

In the age of AI, data inequalities between organizations will become more glaring, moving from competitive edges to critical business advantages. Companies that haven't mastered data governance will find their AI based on unsound insights.

When an organization has doubt about the trustworthiness of its data, it's imperative to rethink its data management strategy based on three steps:

1. Unite data silos so your organization has the full picture

2. Build a catalog for faster access

3. Prepare for the ever-evolving data landscape

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With organized, governed data, businesses learn from all data types with confidence. Teams integrate, catalog and better protect data with compliance-ready capabilities and controls to deliver trusted insights to every part of any organization.

From there, businesses can implement advanced analytics and data science. These results will enable organizations to deliver better insights and better business decisions. Smarter business processes power disruptive innovation.

Collecting data in the right place and having it organized securely is just the start. Putting processes in place to analyze data for insights will generate real business value and enable faster decision-making.

Analyzing data for competitive advantage

How data drives business value

1. https://www.forbes.com/sites/gilpress/2016/03/23/data-preparation-most-time-consuming-least-enjoyable-data-science-task-survey-says/#7451bba26f63
2. http://mitiq.mit.edu/ICIQ/Documents/IQ%20Conference%202002/Papers/DataWarehouseInstituteSurveyonDQ.pdf

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