

# Maximize your ROI from data

Transform your data into digital intelligence that is central to having a competitive advantage.





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## Introduction

Success in our rapidly growing digital economy hinges on data. It's the key to creating greater efficiencies, product innovations and customer services. It can inform entire new business models.

So, it's no surprise that with digital transformation at the top of the corporate agenda, organizations are making significant investments in data, analytics and AI to uncover new insights that can give them the competitive edge.

Despite the high investment, however, returns can disappoint. **In a recent Big Data Executive survey from NewVantage Partners, 73 percent of Fortune 1000 executives reported measurable results from their investments, but only 24 percent acknowledge that the results have been transformative and innovative.**<sup>1</sup>

Deriving more value from data means addressing three fundamental challenges: data inaccessibility, poor data quality, and talent shortages – all amid an ever-expanding regulatory landscape. Meeting these challenges is key to building a strong data foundation that can help inform vital decisions, and, more importantly, support AI. This will yield deeper insights from a wider variety of data, for more strategic transformation.

# Achieve agility and speed in data accessibility

## Make data more accessible

While the growth in data from mobile, social and IoT sources far outpaces traditional transactional data, the unexpected gems of insight come from marrying these diverse sources of information on customers, processes or operations. This requires managing both the scale and distribution of sources to ensure data accessibility.

Traditionally, enterprises used data warehouses to integrate data for analytics. Data warehouses allow data to be cleansed and organized for rapid querying by analytic engines which works well for transactional data. However, with the explosion in unstructured and semi-structured data, various solutions have emerged that are more scalable and cost effective. The most notable example, is data lakes. This option can cost-effectively store large amounts of data in the native format and is well-suited for exploration.

## Data lakes should not be considered a replacement for data warehouses.

Each has its own merits and should be carefully evaluated relative to the intended workload.

In fact, many businesses choose to have both data warehouses and data lakes in their environment. The data warehouse provides a clear and reliable view of time-based trends in business-critical data, already pre-aggregated and pre-integrated, and the data lake helps independently generate insights from new data sources.

Regardless of the data store, we need to consider the dispersion across systems and business units, both on premises and in clouds. These data silos can limit access to data and slow speed to insight.

A flexible and scalable data management architecture can help with accessing data across these siloes, wherever they reside.

Whether it's on premises or in a cloud, the right hybrid data management architecture will enable data consumers to rapidly access, integrate and query the wealth of data, in a governed environment, to uncover meaningful and impactful insights. This speed and agility can deliver competitive advantage.



[Learn more about the benefits of hybrid data management architectures. Register for the full report. →](#)

Organizations believe poor data quality is costing them an average of \$15 million/year with even greater long-term impacts, ranging from reputation damage to missed opportunity and progressive loss of revenue.

# Quality data, confident decision-making

**Data can be a strategic asset for your business, but only when you can trust it**

Data quality and consistency is particularly important in today's environment in which companies are collecting sizable amounts of data from many external sources and holding on to troves of legacy data hoping to "find diamonds in the rough."

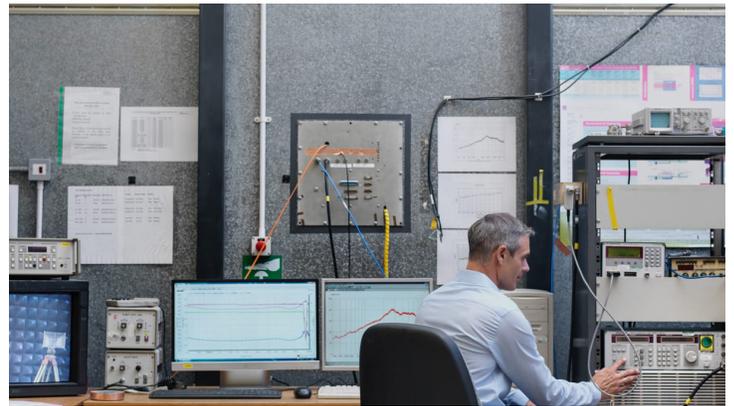
To set up a trusted analytics foundation, it's necessary to remove duplicate data, standardize data, eliminate incorrect and incomplete data, and reconcile data across multiple systems – where a master data management is key.

**With the growing excitement and investment in AI technologies to automatically generate insights and recommendations from data, and the growth of citizen data scientists across organizations, data accuracy is vital**

Consequently, a well-defined strategy to govern and prevent misuse of data is a crucial element to a data strategy.

Compliance costs around \$5.47 million for the average company, while non-compliance costs, including fines, business disruption and losses in productivity and revenue, cost close to 3 times that, around \$14.82 million.

IBM **Cloud**



[Find out how you can better know, trust and use your data.](#)  
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In a NewVantage Partners survey of Fortune 1000 executives, 98.6 percent expressed a commitment to establishing a data-driven culture. They cite technology as a notable barrier, representing 19 percent of their challenge.

# Establish a self-sufficient, data-driven culture

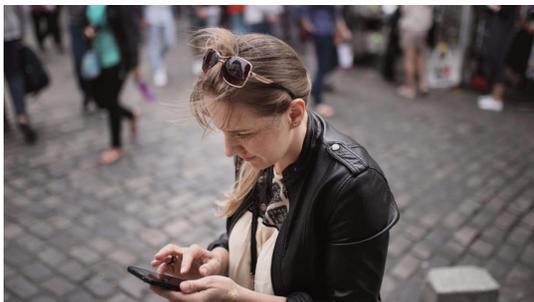
**Faced with talent shortages and pressure to discover and act quickly on insights, businesses need to establish and enable a broader, more collaborative, data-driven culture.**

Self-service analytics tools are beneficial in democratizing data consumption and analysis, freeing highly-skilled data scientists to focus on specific, high value projects that require their expertise while enabling others across their organization to embrace data-driven decision-making and action.

Self-service should not be confused with self-sufficiency. Self-sufficiency means easy access to quality, accurate, governed data and with machine learning to help deliver insights for lower-skilled data consumers.

While self-service provides a basket of raw ingredients to all cooks, regardless of expertise; self-sufficiency offers a basket of fresh, quality, raw ingredients to the trained chef and guided recipes to the passionate, but less experienced cook.

There are numerous self-service tools out there, but without the trusted analytics foundation in place, the only thing you might find is fool's gold.



[Learn more about how to accelerate the infusion of AI into your business.](#)  
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# Get ready for AI

Ultimately, the right data architecture provides a solid foundation for AI to improve organizational processes, create enriching customer experiences and pursue new revenue streams.

**With this in place, you are ready to leverage machine and deep learning to infuse AI more broadly into your business.**

Start by empowering your data scientists to leverage the best open source tools to build, train and deploy models. Next, enable collaboration between data scientists, application developers and domain experts to continuously refine and improve models and rapidly deploy them in new applications, at scale.



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# Conclusion

Data is a strategic asset when a business can use it to respond with agility to new opportunities and threats through innovations that drive business growth and competitive advantage.

They're leveraging a cloud architecture that works with all their data and is AI-ready.

Learn more about how you can achieve this data-driven advantage in a single platform that delivers these valuable data services in a cloud-native, secure architecture.



**Enable ease of access to their wealth of data regardless of where it resides.**



**Build an analytics foundation to ensure compliance, security, and data quality.**



**Create a pervasive, data-driven culture.**

## Read more on how to maximize your ROI from data:



### **Adapting the cloud to new data and analytics**

Make smarter decisions and innovate with hybrid data management architecture

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### **Unified governance and integration**

Build a solid foundation for insights and compliance

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### **Business intelligence for the data-driven application**

Uncover valuable insights and gain a competitive advantage with IBM Cognos Analytics™

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### **Bloor InDetail: IBM Cloud™**

#### **Private for Data**

Create a trusted data foundation and fuel AI and machine learning.

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<sup>1</sup> Gartner, "Magic Quadrant for Metadata Management Solutions," Guido De Simoni, Roxane Edjlali, 10 August 2017.

<sup>2</sup> "The Urgent Need for Hybrid Integration," Stewart Bond, Maureen Fleming, ibm.com, (IDC White Paper sponsored by IBM), July 2017.