

# IBM Data Warehousing: modern ecosystems designed for big data and analytics

Five years ago, IBM observed that the planet was becoming more instrumented, interconnected and intelligent. Some 20,000 engagements later, here's what we've learned that matters in designing a modern data warehouse.

## What is changing in the world today?

### Technology allows us to consume more data and generate new insights.

The scale and scope of big data present new opportunities for innovation and competitive advantage.

### Fast access to insights is among the top requirements for organizations.

To compete today, businesses need to more quickly generate insight from information to accelerate informed decision making and meet new user demands for mobility and self-service.

### These insights are sparking new and rapidly evolving analytics requests.

Big data is generating complexity within traditional data warehouse architectures. Organizations need flexible, efficient cost-effective technology strategies for manipulating data and confidently developing new applications, products and services faster.

## What's at stake? Why act now?

### Your competition may know more, predict better and differentiate.

Your competitors are rapidly becoming increasingly adept at using big data to spot trends, predict the future and get products to the marketplace faster. Simply keeping pace is not good enough. To maintain competitive advantage, your organization must take bold actions now.

### Business expectations are exceeding existing capabilities.

You don't have time to play catch-up with competitors that can more effectively deliver new capabilities and support high-quality decisions through better access to data insights. To look forward and make proactive decisions, you need a data warehouse that can evolve with your business needs.

### You can't innovate if you're busy managing complexity.

Rigid data warehouse architectures can prevent you from rapidly accessing data and effectively responding to new analytics opportunities. The right data warehouse solution must support business needs that have yet to be fully defined—or you risk escalating information management costs associated with analytics and missing out on evolving revenue opportunities.

## So what should you do?

### Become an information-driven organization from the top down.

Get buy-in from executives by building a business case that demonstrates value to stakeholders. Then work to change your culture into one that focuses on information-driven decision making to deliver more value to the business.

### Modernize your data warehouse with a zone architecture.

Break your architecture into zones of capabilities, and evolve your data warehouse within those zones. With the ability to process and analyze more data faster, take advantage of streaming analytics, filter unstructured information and create an online archive, you can deliver insights to more users, offset costs and create a dynamic development platform.

### Accelerate and simplify analytics with new technologies.

Combine technologies, including in-memory analytics, Apache Hadoop and cloud, and leverage prebuilt solution capabilities for next-generation analytics that can accelerate innovation and enable you to make business decisions at the speed of thought.

## How can you innovate?

### Create an information-based culture.

Extend insight across your enterprise and provide greater visibility into operations to empower employees to make high-quality decisions.

### Find opportunities hidden in your data.

Gain immediate access to your data and derive more-meaningful insight faster to support a new era of innovation and gain competitive advantage.

### Fuel decisions with better data and analytics.

Make similar decisions better by designing a logical data warehouse that uses multiple technologies to access information assets faster, regardless of location.

### Transform service levels for analytics.

Incorporate technologies specifically designed for quick-value analytic initiatives and self-service requests, which can integrate with your existing data warehouse investments.

### Redeploy resources to strategic initiatives.

Create an efficient data warehouse and analytic ecosystem that enables you to shift IT resources from maintenance activities to innovative projects that can generate business revenue and new opportunities.

## Why IBM data warehousing?

IBM is a strategic ally that can help you:

### Innovate by effectively meeting a broad and ever-evolving set of data management needs

The faster you can identify relevant data, the faster you can access the actionable insights necessary to make smarter decisions for competitive advantage. IBM is one of the only vendors to infuse cognitive capabilities into its data warehouse strategy to help you capitalize on the next wave of business intelligence. Through our strategic acquisition strategy and organic development born from IBM Research, we have amassed true best-in-class data warehousing solutions that address virtually every information need. One great example is IBM DB2® with BLU Acceleration software running on IBM POWER8™ processors, which uses in-memory database techniques to significantly improve performance and help you stream and analyze data as it's created.

### Boost the success of your data warehouse initiative

Speed key business initiatives and time to value by leveraging interconnected data warehouse solutions backed by deep industry expertise. IBM combines proven technical solutions, a sharp focus on integration and award-winning industry experts to help ensure the success of your data warehouse initiative. Plus, IBM is an industry leader in providing a broad solution portfolio that targets key aspects of data warehousing—including data integration, governance and security—and offers the core capabilities you need.

### Modernize your data warehouse to fuel real-time business

Harnessing trustworthy data from myriad sources can help ignite your next business breakthrough. IBM's investments and breakthroughs in technology and research and development, including a record 6,809 patents in 2013, are substantial. We're continually innovating to offer the technology and deployment models, such as cloud, that you need to develop deeper analytic and predictive capabilities and uncover and extend insight enterprisewide.