

Big data
The three-minute guide



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What is big data?

It's about insight

Big data generally refers to datasets so large and complex they create significant challenges for traditional data management and analysis tools in practical timeframes.

The sources of big data are numerous and growing. Think about transactions from financial markets and e-commerce sites, chats on social networks, signals from RFID tags, cell phone conversations, urban traffic cameras, surveillance cameras, web search and browsing patterns, and even weather satellites. Big data covers all these stores of information and more.

For industries such as telecom, media, and banking, big data collection is already table stakes. In other industries, the move to big data is more of a choice to explore and seek competitive advantage through greater insight. But it is not a choice that comes without risks.

Why it matters now

Big data can help drive better decisions

That's why so many organizations are jumping on the bandwagon—tracking consumer sentiment, testing new products, managing relationships, and building customer loyalty in more powerful ways. It's all about the business. It has to be.

Many of the early success stories came from Internet and telecommunications giants and large financial services companies. With so much data generated in the course of daily operations, these companies had no choice but to tackle big data early and aggressively.

Companies that don't generate huge amounts of transactional data may have even more to gain in terms of disruptive innovation. Social networking data, for example, can supplement limited internal data and offer potentially outsized insights into customer relationships, pricing, channel management, marketing, trend forecasting, and more.

What you can do with big data

Where big data makes sense

Exploit faint signals. Big data can help make the most of weak signals from multiple and disparate data sources.

Nurture experimentation. Big data takes advantage of the marketplace—a natural laboratory—by allowing data from wide-ranging sources to be segmented, analyzed, and controlled.

Imagery and video analytics. Big data makes it possible to gather intelligence from unstructured data—things like photographs, online videos, social media, and voice recognition systems.

Deliver real-time impact. Velocity is a foundation of big data value—from the growing array of sources to up-to-the-minute impact on organizational decision-making.

The benefits

What's in it for you?

Big data is all about making better business decisions—faster and with more confidence. In which of these areas would your organization benefit from smarter decisions?

Customer & growth	Supply chain	Finance	Workforce	Risk & Regulatory
Pricing & profitability	Supplier & procurement analysis	Financial performance management	Performance management	Regulation & compliance
Customer segmentation	Supply chain optimization	Advanced forecasting	Workforce alignment	Fraud & forensics
Brand & sentiment analysis	Product profitability	Governance, risk, & compliance	Compensation & benefits	Cyber & reputational risk

What to do now

Options for action

Crunchy questions. Ask highly specific questions about critical business issues. Only those data sources deemed important for action should receive care and feeding.

A 15-degree view of the customer. Don't let people get hung up on creating a single, unified, canonical data store.

Nimble everything. The structure of incoming data is often not known in advance, and it can change over time. Make sure teams have wiggle room and that your technology can support such flexibility.

Co-existence. Don't tolerate political arguments between conventional analytics teams and big data advocates. They're both right.

Build your bench. Good talent is scarce. Start by cultivating the talent you already have—then gear up to attract new contributors.

Time's up



Will big data really help?

Many companies are getting into the action on big data with resources they already have. They're working in parallel with related investments in information management, business intelligence, data mining, and traditional analytics.

But before you do anything, stop and think through the issues. Don't get swept up in the hype. Big data means different things with differing levels of value for different organizations.

For some companies, big data may be an important or even central component of their strategy. For others it could be an expensive distraction. Will big data really help your company? Find out by identifying the most important business questions you need to answer.

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