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# GSAM | Perspectives

## The Data Revolution

### The Big Deal About Big Data



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A closer look at how data analysis is driving innovation across a wide variety of industries and the economy at large.

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### Revolutionizing Industries: Better Insights, Better Results

Digital information is stored, shared and accessed more than any of the technologies preceding it. Investors have access to an enormous amount of information on every public company—information that can potentially influence stock prices and other investment opportunities. There are limitations to what any single person can take in, which makes computing power more essential than ever. Advanced analytics and superior processing technologies are key to extracting value and actionable insights from this abundance of information.

Here are a few examples of how data analysis is driving innovation and competitive advantages across the economy at large.

**Health care:** McKinsey & Co. estimates that big data has the potential to create \$300–450 billion in cost savings in the health care industry by optimizing patient care—through detection and remediation of ailments earlier and more effectively.<sup>1,2</sup>

**Auto insurance:** Many insurers now offer discounted rates to customers who install tracking devices in on-board

diagnostic systems—providing that they drive with care.

**Agriculture:** “Precision agriculture” uses high-tech equipment, cloud services and data analytics to increase crop yields, lower environmental impact and reduce costs.

**Transportation:** Ride-sharing services are crowd-sourcing the taxi industry through a network of drivers for hire. Users can download a mobile application to their smartphones, and rides are priced based on time of day, location and demand.

**Travel:** Many data-driven travel websites offer comprehensive booking options and calculate prices in real-time from a wide range of sources to identify the best deals.

**Retail:** Customer loyalty programs collect consumer data which is used in predictive models to segment customers, drive pricing and determine which promotions to offer.

**Sports:** Advanced player statistics enable organizations to construct more cost-efficient teams through improved talent evaluation.

## Big Potential

Data alone has little worth unless it can lead to timely and informed action. Data users must also exercise judgment and careful oversight, since blindly relying on data analysis can be dangerous. Our view is that the effective use of data requires careful stewardship from investment managers, and that the pairing of human judgement with technology produces the best results.

We believe investors should recognize its potential to reshape the economic landscape. As the changes produced by the Data Revolution continue to ripple across industries, those who can harness the power of big data may enjoy a competitive advantage.

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1. “Kayyali, Basel, Knott, David and Van Kuiken, Steve, “The Big-Data Revolution in US Health Care: Accelerating Value and Innovation,” McKinsey & Co., April 2013.

2. Orbital Insight

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