



Big Data and Analytics: The Fuel of the Internet of Everything Economy



You already have one of the most important assets needed to succeed in the Internet of Everything (IoE) economy: your data. But are you really capturing the full potential of this data?

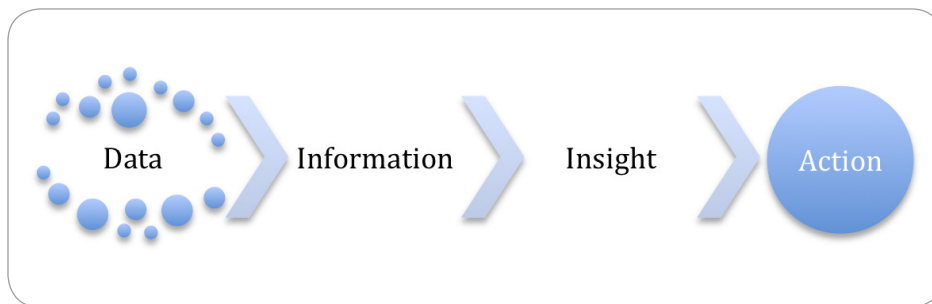
The data that has been traveling over your network for years has always been one of your most important assets. Everything from sales data to facility records has always been critical to your business. Now the Internet of Everything captures even more valuable data. Billions of sensors, smart devices, social websites, and video cameras are producing new “big data” at a staggering rate. Combining these new information sources with your existing data can create striking new insights to help you capture new value from your business, your customers, and your suppliers. In fact, recent Cisco research estimates that the Internet of Everything and the data it makes available can unlock \$14.4 trillion of value for companies worldwide over the next decade by improving customer experience, innovation, supply chain, asset utilization, and employee productivity.

But most companies are not yet capturing this new big data opportunity. The reason is simple: it is not easy. The things that make data big—high volume, variety, and velocity—also make it difficult to collect, understand, and use. Big data in its raw form is typically unstructured, streaming, and often imprecise. Such big data is not easily aligned with your well-defined and orderly enterprise data. It has awesome potential, but is very difficult to manage. That is why few companies are able to capture the full potential of big data.

Analytics help you tame big data. Simply put, analytics are mathematical tools, made possible by information technology, to extract insights from big data. However, most analytics follow a centralized model. They collect data from a sensor, then move that data to a central location, where it is analyzed and stored. This traditional architecture has been effective for most analytics. However, as the Internet of Everything increases the amount and speed of data collection, this old centralized way of analyzing data can be overwhelmed and start breaking down.

Cisco and Big Data

Cisco built the technology highways on which data has been traveling for over 25 years. We know more about traffic patterns on the network than anyone else. We have pioneered advanced analytics to understand what those patterns mean. We are also developing technologies to filter, process, analyze, and act on large, streaming data at the edge of the network, where it is collected. This can dramatically reduce network bandwidth constraints, shorten analysis time, and increase data reliability. In short, analytics performed at the edge of the network are critical to realizing the full value of the Internet of Everything.





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Cisco Consulting Services Analytics Can Help Your Business

Cisco® Consulting Services help accelerate our customers' ability to capture the \$14.4 trillion value of the Internet of Everything. We provide strategic services, including value-at-stake analytics; portfolio prioritization and roadmaps; and solution design, build, implementation, and management services.

Our analytics practice has deep data-science capabilities to help you unlock new business insights that are "hidden" within big data. We combine network-based data analytics with real-time streaming analytics and other data sources, both at the core and at the edge of the network, to provide repetitive and actionable business insights through a value-based consulting offering.

Cisco Analytics combine classic strategy consulting, deep experience in data science, and technology implementation to help you achieve practical solutions quickly. We help you identify, design, prototype, and implement big data analytics solutions quickly and cost effectively by using our core strengths:

- Our staff of professional and experienced data scientists, business consultants, computer/network architects, and system integrators
- Cisco's integrated data analytics platform and technology solutions
- Cisco's unique knowledge of the network drawn from our 25-year history, vast installed base, and more than 25,000 engineers

Further, given technology's rapid change, our focus is on speed. Our FastStart solutions help you design, prototype, and deploy solutions in short time horizons. We do this by focusing on business areas where we have deep, replicable capabilities. We currently are focusing on four major areas:

- Enhancing customer experience and lifetime value
- Improving organizational effectiveness and productivity
- Improving value chain efficiency and profitability
- Improving the business and economics of IT

From helping you define and capture your business objectives through measuring your success, Cisco Consulting Services Analytics practice uses our 25 years of world-leading network and analytics expertise, harnessing smart analytics across the network to provide innovative consulting services and business insights to create real business value.

Start fueling your Internet of Everything economy. Realize the profitability effects of informed decisions. Learn to apply analytics transparently across multiple data sources and business domains to promote innovation. Contact your Cisco account manager or ccs-analytics@cisco.com.