Bringing the Value of Big Data to the Enterprise

You know big data can provide benefits for your organization, but managing the mountains of data—and making them useful and available to the enterprise—requires a different approach. Oracle Big Data Appliance provides a complete solution that can help you uncover new insights about your business.

Everyone agrees. The amount of big data is exceeding all projections—with no leveling off in sight.

You probably already collect big data, so you know that the nontraditional, unstructured data from social media, user forums, and blogs (to name just a few), and machine-generated data (such as mobile device logs) can be mined to provide new insight for your business. And yet, if you’re like most companies, you admit that you don’t have a plan to tap into your big data.

What Is Big Data?
Big data is composed of both machine-generated data and human-generated data.

• Machine-generated (sensor) data includes automatically generated data from call detail records, blogs, smart meters, manufacturing sensors, equipment logs, trading systems, vehicle tracking, and so on.

• Human-generated data includes customer feedback streams, microblogging sites (such as Twitter), social media platforms (such as Facebook and LinkedIn), documents, images, video files, call logs from CRM systems, and direct interactions with customers, suppliers, and employees.

The Challenge of Big Data
Organizations have been capturing big data for years, but it’s often in a variety of nonstandard formats and located in isolated silos around the enterprise.

Only recently has the technology become generally available to create an infrastructure that can process and manipulate big data. The challenge of big data today is finding an efficient, cost-effective, and timely way to make big data accessible, so you can use and analyze it—in conjunction with other enterprise data—to get more insight about your business.

Big Data Needs Big Solutions
What if you could tame big data so that it was easily accessible across the enterprise? What if you could use it to get answers to questions you couldn’t even ask before?

THE BIG DEAL ABOUT BIG DATA
Big data can be unwieldy. It takes up huge amounts of storage and comes in a variety of less structured formats. The relationships between the various data sets are often unclear. So, is big data really worth it?

That depends.

Big data is often isolated from traditional transactional data and located in silos across the enterprise. Only recently has an infrastructure that can support the various aspects of big data become available to business and practical for their bottom line.

With the right analytics, big data can provide invaluable insight into your customers, prospects, product performance, supply chain, and more. Businesses are recognizing the competitive advantage that can be gained through big data analytics, and they have made using big data part of their strategic goals.

The value of big data is real. But to harness that value, you need a fast, cost-effective solution that can transform big data into accessible information.
FACT: A recent Oracle survey of 333 C-level executives found that a full 94 percent of respondents felt their organization was unprepared to take advantage of big data. Oracle offers a portfolio of integrated solutions to help you analyze big data alongside your existing data to help you gain new insight and make big data a true asset for your organization.

"ESG believes that for a true enterprise-class big data project of medium complexity, Oracle Big Data Appliance will deliver nearly 40 percent cost savings versus IT architecting, designing, procuring, configuring, and implementing its own big data infrastructure."

"Getting Real About Big Data: Build Versus Buy," Evan Quinn, Senior Principal Analyst, Enterprise Strategy Group, February 2013

For example, what if you could find out—not only which products were selling—but also which products were most likely to sell in the future, based on customers’ past buying patterns? What if you could use big data to get more-detailed, more-complete information about your customers, the market, and your competition? In other words, what if you could incorporate big data into your organization and get the benefits and insight without all the headaches?

Big Data Solutions from Oracle
Oracle brings the benefits of big data to the enterprise with Oracle Big Data Appliance—part of a total, integrated platform that includes Oracle Exadata, Oracle Exalytics, and Oracle Big Data Connectors (software for easily integrating Oracle Database and Apache Hadoop, the open source foundation for big data processing). With the in-a-box simplicity of all Oracle engineered systems, Oracle Big Data Appliance takes care of the “heavy lifting” associated with big data, including:
• Acquiring and managing all types of raw data (both structured and unstructured) from a variety of sources
• Performing the initial analysis and organizing the data
• Making the data immediately available for SQL queries or for loading into an Oracle data warehouse for integrated analysis with other enterprise data

With Oracle Big Data Appliance, you can quickly provision a single system that’s scalable, highly available, and optimized to transform massive amounts of data into usable information.

Build It Yourself or Use It Now?
It’s a fair question. After all, anyone can download Apache Hadoop for free, and then create a minimal infrastructure to run it. But then what?

Unless your organization already has the hard-to-find experts who can engineer a solution to get big data in and out of Apache Hadoop in a form that your analysts can use, you could end up spending more in consulting fees and longer schedules than you would for a complete Oracle Big Data Appliance solution.

When you compare the cost of building your own system to using Oracle’s prepackaged, preassembled, and preintegrated engineered system, it doesn’t take long to realize that Oracle Big Data Appliance—with its optimized hardware and comprehensive, preconfigured software—is the more cost-effective choice. Oracle Big Data Appliance comes with a full set of the software you need to work with big data, including:
• Cloudera’s Distribution Including Apache Hadoop (CDH)
• Cloudera Manager for clusterwide administration and monitoring of CDH

• Oracle NoSQL Database for fast, low-latency access to massive amounts of data, and for supporting data retrieval and data updates
• An open source distribution of the R statistical environment for deep analysis of big data

With Oracle Big Data Appliance, you reduce risk and operating costs because you don’t have to procure and configure hardware or make sure you have the right open source components (and versions). And, of course, all system integration and optimization is already done for you.

Extreme Performance Is Standard
Not just performance, but extreme performance. For Oracle Big Data Appliance, this means a solution that lets you
• Rapidly provision a scalable and highly available system
• Manage both structured and unstructured data
• Provide deep analytical capabilities
• Deliver actionable data to users sooner
• Reduce your time to productivity

In addition, qualifying Oracle Premier Support customers can get Oracle Platinum Services—with remote fault monitoring and industry-leading response and restore times—at no extra charge.

Join the successful organizations around the world that are simplifying IT and powering innovation with Oracle Big Data Appliance as their big data solution.