

## Big Data

# The Real Deal With Big Data

By Maureen Errity and John Lucker

Executive teams face myriad opportunities and risks in decisions regarding big data and related technologies. For their part, boards need to understand what big data is and why it matters, and where the highest-value applications of big data may be found.

Misuse has rendered the term “big data” almost meaningless or, at best, ambiguous. To some people it means any massive data set, but massive is in the eye of the beholder. To others big data means any external data used in predictive modeling and other advanced analytics. (Analytics properly refers to the supporting technology and tools associated with analysis.)

Here’s a definition we find practical and useful: *Big data is structured and unstructured data generated from diverse sources in real time, in volumes too large for traditional technologies to capture, manage, and process in a timely manner.* This includes data from websites, blogs, news feeds, social media, public and private databases, and other internal and external sources.

Big data is massive and impressive, but its value depends on an organization’s ability to analyze it in useful ways. That is where advanced analytics come in.

Advanced analytics, applied to big data, can help detect opportunities and risks that may otherwise go undetected. It can flag possible biases in management thinking, marketplace inefficiencies, and emerging developments. Big data provides a new window on the world, but *the right* analytics tell you what you’re looking at and help you understand what it means to the organization.

### What Are the Right Analytics?

A focus on *strategic* analytics—advanced analytics related to opportunities and risks

that impact enterprise value—can guide management toward high-return activities. Strategic analytics requires a context, which the organization may want to establish through the following process:

**Step 1: Start with the business strategy.** Rooting analytics in the business strategy connects it to drivers of value and promotes flexibility and discipline. It also fosters fact-based decision making, as opposed to “ivory tower” analyses.

**Step 2: Focus on analytical activities.** Big data should support and refine existing activities such as demand analysis, customer segmentation, supply chain analysis, financial analysis, and risk analysis, among others. Analyzing big data without a defined purpose misallocates resources.

**Step 3: Tie analytics to operations.** Linking analytics to daily operational activities can generate powerful results quickly. This linkage may also prompt management to reconsider legacy systems, operations, and procedures, *and* to update and enhance them.

**Step 4: Integrate the technology.** Existing data, systems, and tools should be incorporated into strategic analytics and migrated from narrow applications to enterprise solutions. Analytics should also be integrated into existing technology and business intelligence tools, with information technology updated as needed.

**Step 5: Manage organizational change.** Flagging business opportunities and risks is useful only when people can act upon the information, which usually means acting in new ways. Changing mind-sets and prompting new behaviors require strong leadership. Thus, analytics strategy may need to include change management

supported by training, communication, and executive sponsorship.

**Step 6: Upgrade performance management.** To boost enterprise performance, the foregoing steps should be linked to the right performance metrics. Performance improves when analytics and key performance indicators are integrated to encourage people to act appropriately and profitably in response to new information. Also, measuring adoption and outcomes of analytics solutions can identify enhancements to make in subsequent iterations of the foregoing steps to support continuous improvement.

A process like this can position an organization to identify high-return applications of big data and related analytics. Without such a process, some gains can be achieved but with considerable risk of misallocated funding, talent, time, and technology. By setting big data and advanced analytics in a strategic context, the board can work with management to minimize those risks while maximizing the positive impact on enterprise value.



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