Big Data: Where to Begin

Here's how to minimize risks and maximize business results

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Today's Environment

From retail and manufacturing companies to healthcare, financial services, technology and energy, big data is changing the way organizations gain insight from their business intelligence systems. Big data relies on emerging high-powered data storage and processing technologies that capture, store, process and analyze data in which there is significant volume, velocity, and variety. The purpose: to use the actionable insight gleaned from this vast data flow to create new business value.

Initially, big data was only feasible for large companies with equally large IT budgets. Now, with the advent of inexpensive, expandable cloud-based storage and processing, big data is accessible to a much wider world of companies. Industry experts expect the rising adoption of big data solutions to explode in the coming years. It's an evolution in business intelligence that raises important questions for companies: What can big data do for our business? Can we afford to implement a big data solution? How do we get started, and plan for success?

Point B's Perspective

Point B has delivered an array of big data projects for our clients, from conducting readiness assessments to implementing and operationalizing big data solutions

that encompass people, processes, technology and data governance. We take a pragmatic, results-oriented point of view, which informs our thought leadership around "two R's": assessing the *relevance* of big data to our clients and assisting in their *readiness* to take it on. After all, big data is worth nothing to your organization unless it leads to added business value. That said, there's much to consider in deciding whether adopting a big data solution is right for your organization—and much you can do to minimize risk and maximize the business results you get. This article shares three insights from our collective experience that can help your organization get off to a strong start.

Build on What You Have. First, keep in mind that big data capabilities are an addition to your existing business intelligence or IT platform, not a wholesale replacement. Think of big data as an incremental build on your current capabilities to store, analyze, visualize and report on data. It's a matter of integrating new and "bigger" capabilities into your existing platform—not starting over.

For example, data warehouses still have their place in business intelligence organizations. But as the volume of your organization's data increases to "big," you need the ability to store more data, along with more computation cycles to process and make sense of it. You may need to add or upgrade data warehousing capabilities, analytics applications, reporting systems

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and data visualization tools. New options in cloud-based data storage and distributed computing can be integrated into your existing business intelligence platform, greatly advancing your ability to perform data analytics and gain actionable insights that lead to better business outcomes.

Take Incremental Steps. Much of the buzz about big data makes it seem like a daunting, all-or-nothing proposition. But it's our experience that most organizations benefit from adopting big data in incremental steps that manage the upfront investment and budget risk associated with taking on new technology.

For example, while you're still exploring the value of big data to your organization, you can keep your initial

No matter how small the first step, you'll want to take it with your destination in mind. We advise our clients to take a holistic view of big data, helping them create a roadmap that shows the gap between where they are and where they want to be. Where do you want to start first? Where is your organization in terms of business intelligence capabilities and maturity? Making the most of big data requires a candid readiness assessment of people, processes, technology and data governance—which leads to our final point.

Think Beyond Technology. While technology steals the spotlight in many discussions of big data, it's only one part of the equation. It's essential to consider whether you have the right people and processes in place to implement and operate a big data solution.

A useful big data solution supports a process that leads from data analysis to insight to more effective decisions, actions and improved business outcomes. To take advantage of big data, you'll need to consider people, processes, technology and data governance.

investment to a minimum by using services instead of buying your own hardware and software. Services such as Amazon Web Services and Windows Azure have expandable computing and storage platforms that enable you to store and process massive amounts of data. Sign onto one of these services for three months, and see what you learn. Start with a hypothesis and test it with your new access to more data and analytics. If you're pulling in new data and gaining new insight from analyzing it, you may want to bring in additional data that allows you to get even more targeted in your analysis. The key is that you increase your investment in sync with the value of what you're learning, showing results as you go. As you prove the value of big data, you build a rationale for moving forward and gain valuable experience that will be useful as you do.

It takes what we call "a curious organization" to derive maximum long-term value from big data. The answers you get from big data are only as rich, meaningful and valuable as the questions you ask. The value of big data is in asking insightful questions that build on each other over time, learning from the answers as you go, and letting these new insights inform new and better questions. Organizations that encourage a culture of perennial curiosity, exploration and "what if?" experimentation have an ongoing advantage.

In addition to having curious data consumers who drive value into your big data solution, it takes a disciplined IT staff to implement, operate and maintain a robust big data solution. With large volumes of data continually flowing into your system, anything that happens to your system will affect your big data capabilities. Finally, big

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data needs to be governed—with standards, protocols and security rules that allow your organization to adopt big data more rapidly and reap its rewards.

Will you need to invest in new people? We find that most organizations want and need to create a position dedicated to their big data initiative. Large companies often have someone they can roll into the position; smaller organizations may find that they need to add a person. Whoever is brought on to help lead the initiative should be adept at spanning the needs and interests of business and technology to develop big data solutions that add value to the business. In addition to understanding the technology, it takes business acumen, a product management mindset that represents business needs, and an understanding of process optimization.

The Bottom Line

Big data is a means, not an end—it's high volume raw material with the potential to bring new insight to your organization. It's worthless unless and until all that data is translated into business value. In our experience, the organizations that thrive on big data begin with this end in mind, and take thoughtful, incremental steps to get there.

Most companies are still in the tinkering phase, figuring out how to capture more and better ongoing business value. Companies who get the biggest bang from big data are systematic—taking incremental steps, gaining new insight, identifying wins and, most important, making them operational.

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