Making Big Data Work

The Power of Real-time Business Analytics

As more and more of today's enterprises are succeeding with big data, capturing real transformative value that just a short time ago seemed unattainable, the rest of us are standing at attention. Companies in nearly every industry across the globe—healthcare, retail, energy, transportation and entertainment for example—are using big data in real time to increase company value and market share. As with other technology "firsts," from these pioneers we can glean the kind of business intelligence the C-Suite loves—the kind that comes from legitimate experience with real data and analytics in actual business situations—and use it to our advantage.

If you've been gun-shy about taking on your company's big data challenges, now's the time for action.

The Big Deal

According to Gartner, "Through 2015, 85% of Fortune 500 organizations will be unable to exploit big data for competitive advantage." ¹ But why? IDC predicts that the big data and analytics market will reach \$16.1 billion in 2014 ². So what are the insurmountable hurdles being faced by today's companies that are keeping them from reaping big benefits?

It is a combination of issues, from lack of strategy to cost, and even internal conflict. Here are some of the top challenges organizations like yours may be facing with regard to big data, and solutions to help you get moving on the path to success.

1. DATA? WHAT DATA?

Starting with the information itself, it's important to know what you have. Ask these questions: What data has your company been collecting, for how long, and where is it? What parts of the data are usable, and what are your goals for it? And, most importantly, what value can be generated from it? Changing the way your company collects, manages and stores data so that it can be analyzed and used, and possibly consolidating your infrastructure so that information is more easily managed and efficiently stored, may be in order.

You must also consider the growing Internet of Things (IoT) market, and what it can mean for your business. The IoT is the concept in which sensors and actuators are embedded in objects— everything from cattle to cars—and are linked through wireless networks. These sensors are pumping out massive amounts of data. According to a report from IDC, "The IoT market will greatly impact and offer the potential for vertical-aligned businesses to improve both performance and profitability." But, IDC also warns, "The initial strategy of businesses should be to avoid choosing IoT-based solutions that will solve only immediate concerns and lack 'staying power'." Therefore, pulling IoT data from external providers and social media to integrate with your applications could mean huge value to your business, but choosing the right IT solution sets can mean greater success down the road. And it's not just the analytics part that needs consideration—all that data will need to be managed, accessed and stored as well.



¹ Gartner "Big Data," Gartner.com, 2014

² IDC, "Worldwide Big Data Technology and Services 2013-2017 Forecast," December, 2013

³ IDC, "Worldwide Internet of Things Spending by Vertical Market 2014-2017 Forecast," Scott Tiazkun, Monika Kumar, February, 2014

2. LACK OF A BIG DATA STRATEGY

Since big data and analytics (BDA) initiatives are centered on change across many areas of the business, you need a strategy— with executive insight and buy in—that makes sense to your organization. Changes are likely to occur to your business processes, infrastructure, even organizational chart and economics with these initiatives, so developing a big data strategy will help keep projects on track and within budget. Development and implementation of your strategy may require help from outside sources, so don't feel limited to the staff you have on hand. Relying on your in-house IT may end up costing more in the long run than a big data consulting firm with experience under its belt. And, since technology is an important part of your strategy, technology service providers can also be the tipping point for your success.

3. DEPLOYMENT AND BUDGET ISSUES

Big data discussions can lead to conflict between the information management and the high tech sides of your business. There are opportunities here to make decisions that can bring great value from big data, but often the two sides don't agree. An integrated approach in which all relevant information is instantly accessible via a unified system is ideal. Therefore, it's critical that these two groups and others involved in BDA projects find common ground.

If budget has been your main obstacle, there are options. Hadoop, the big data open source database, has saved many organizations hundreds of thousands of dollars, and it can be integrated with in-memory platforms and analytics solutions that pick up where it leaves off.

The Reality of Real-time Analytics

"Many firms are finding that data analysis methods they've embraced for years flounder in an increasingly complex business ecosystem requiring quicker decisions on more granular levels and at far greater scale," according to Wes Nichols, CEO of MarketShare 4. In fact:

- Rapidly changing business environments such as transportation, retail, communications and telco require real-time planning and optimization
- Customer interactions can be transformed into realtime consumer insights for precision targeting and personalized, more engaging experiences
- Employees can make critical decisions faster with real-time visibility into business situations

These types of real-time analytics are achievable now because of a recent technology shift. Instead of having to access secondary storage or external memory, which has been the norm for analytics and database access, you can now have analytics with in-memory data processing. In-memory computing architecture retains data in primary storage so that it can be accessed faster—up to 1,000 times faster—than before. That means your employees can access big data and get information they need in seconds, as opposed to days, or even weeks.

The Future is Here

Luckily, the big data tree has already been planted. Early adopters are actually seeing results and taking market share from competitors with the help of business intelligence and analytics solutions. If you've been hesitant to take the necessary steps toward big data and analytics, it's a good time to make your move.

About Touchstone

Touchstone is an IT services company that architects business solutions for organizations in all industries, across the U.S. With focus on optimizing business processes and maximizing ROI on SAP solutions, Touchstone provides a short delivery cycle, seamless integration and superior support services.

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