Big Data Isn’t a Big Problem

BY RYAN BRILEY

A common question circulating through IT departments the past few years is, “What are we doing about Big Data?”

This question is typically viewed as a problem statement that an executive is tasked with solving (i.e., what technology, data, and process do we need to implement). The Big Data craze is worth digging into given success stories that continue to make headlines. Largely due to smartphone adoption, more than 90 percent of the world’s data has been created within the past two years (2.5 quintillion bytes daily).1 Gartner estimates that in 2011, 28 percent of decision-makers required a Big Data solution to gain insights. That’s expected to rise to 50 percent by 2014, and to 63 percent by 2018.2 This all serves as powerful evidence for how Big Data and analytics are currently, and will continue to be used as a competitive advantage. How to approach it can seem mindboggling, but listed below are insights on how to tackle the elephant in the room.

TECHNOLOGY ISN’T THE PROBLEM YOU’RE TRYING TO SOLVE ...

A popular definition of Big Data is: data sets that are high volume, high velocity, and high variety. Many software packages on the market seek to master all three of those aspects. Trying to determine which technology and how much to invest can be difficult without a clear definition of objectives. The platform can seem like the toughest part of a Big Data problem, but it’s not the primary problem that needs to be solved. Getting better, quicker, and more reliable information to decision-makers to address a key business problem is the reason why Big Data platforms are constructed. Return on investment for technology solutions should be based on a clearly defined business problem that needs to be solved, not the other way around. Data and storage by themselves aren’t innovative. The magic is in how you use it to drive insights.

DEFINING THE PROBLEM ...

Start by answering the question, “What would you do if you knew?” For example, how would you engage with customers differently if you could predict spending patterns with 95 percent accuracy? How would you adjust your support teams if changes in customer demand were available in real-time? Spending time up front defining those key questions and the information needed to support them makes the next steps much simpler.

DEFINING THE PEOPLE ...

One characteristic of companies that have utilized Big Data and analytics as a competitive advantage is their executive support. Once the problem has been identified, there needs to be a champion who can help ensure the right amount of resources are applied to achieve the vision. Another common key role is the “Data Scientist.” At one extreme, it can be PhDs well versed in advanced statistics, but more simply, it’s a person or team who understands the business problem, defines the analysis approach, communicates the data needs to IT, and can articulate meaningful insights back to the decision makers.

DEFINING THE PROCESS AND TOOLS ...

The primary result of a Big Data effort is extracting meaningful insights. The insights can be powerful in coming to a decision, but should not be thought of as “one and done.” Defining an ongoing process of decision, testing, and revisiting results helps to ensure that any decisions made have the desired outcome. Finally, you must select the right technology platform, which is by no means an easy task. One thing to keep in mind when going through that process is, no matter how complex the technology or how big the data set, the results will most always boil down to a single slide with a recommendation for the decision maker.

Mastering the usage of Big Data isn’t accomplished overnight and likely never will be, as the technology and data sources change daily. Organizations have business problems where they need decisions on direction. Big Data should be evaluated as a means to solve that problem, not a problem in itself. Defining the business problem, the people, and the process first will help ensure the right tools are used to support the bigger picture.
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