By Shilpa Aggarwal and Nimal Manuel

Big data analytics should be driven by business needs, not technology

Big data analytics can deliver massive value, but too often companies let technology guide their efforts. Instead, decisions must be based on business priorities.

Despite how it's practiced in many companies, big data analytics is not trawl fishing. It's spear fishing. To get the greatest value from a stockpile of data, a targeted approach based on clear business cases generates more value than simply throwing out a wide net and hoping something valuable is found among the catch.

Too often businesses eager to join the big data parade focus on technology. From this perspective, they acquire the newest analytical tools and assemble a mixed collection of technology stacks. However, without a clear idea of the business challenges that must be solved or opportunities that can be captured, the return on investment from this approach is limited.

The best companies have shrugged off the excitement surrounding big data and adopted an approach that centers on clear business cases. Business strategy and proven use cases – individual instances of practical applications – guide investments and deployment at these companies. For example, they target increased cross sales by using analytics that offer next-product-to-buy recommendations or improved pricing strategies by analyzing consumer elasticity better.

While details of implementation for each company will be unique, our research and experience suggests that excellence in four areas is crucial to gaining value from big data analytics as a complement to strategy: a solid anchor to business value, a pragmatic approach to IT, attracting scarce talent, and getting insights to the front line.

Anchored to business value

A sharp understanding of the business value to be captured is crucial from the outset. A top-down perspective of the relative potential benefits offered by various options, grounded in analytics, allows companies to anchor their big data strategy to proven business value. From this analysis, priorities can be established.

The details vary by industry – and even by individual company. Taking the telecommunications sector to illustrate, targets could include maximizing customer value through cross selling and other tactics, improving the customer experience through channel optimization and better service, rationalizing network deployment, and cutting maintenance costs using predictive maintenance. Each case requires a unique approach, data set, processes, and staff behavior to extract maximum value.

Pragmatic approach to IT

While big data analytics shouldn't be driven by technology, technology powers the effort and cannot be ignored. Companies should take a pragmatic approach to IT investments, basing purchases on proven use cases and squeezing as much value out of legacy systems as possible. This approach not only delivers more immediate results, but also helps minimize capital expenditures on technology.

Campaign management systems offer an example of the saving potential of pragmatic investment. These systems allow automated processes, such as campaign creation and triggering, workflow plans, contract enforcement, channel management and other functions. Off the showroom floor from top developers, such systems can cost millions, but most companies have legacy systems that can serve as a foundation for campaign management systems when supplemented by semi-automated processes as necessary. Such pragmatic investment can save time and cost.

Attracting scarce talent

Demand for top talent in big data analytics exceeds supply by a wide margin. Research by the McKinsey Global Institute concluded that by 2018 the United States alone could face a shortage of 140,000 to 190,000 big data experts. Companies must have a clear strategy for identifying and recruiting analytics experts, as well as developing internal capabilities.

In competing for talent, companies should create value propositions that go beyond competitive salaries. For example, the opportunity to solve the nascent field's trickiest problems and become an acknowledged thought leader can bring in ambitious young minds. But despite the scarce talent, companies must choose candidates who match their strategic needs and understand how to create technical solutions to business challenges.

Internal talent must also be developed with a clear view of strategic needs. One approach is to create a center of excellence that allows staff to develop their capabilities across a range of business use cases and amplifies their contributions to corporate performance.

Bring insights to the front line

Getting the insights developed from big data analytics to the front line is the vital last step to capturing its value. The final stretch from analytics to profits relies heavily on getting information to frontline staff and encouraging them to act on these insights.

Human nature often resists change, and getting frontline staff to use recommendations proposed by big data analytics can be the greatest hurdle to success. Careful attention must be afforded this final step of implementation. Demonstrating the effectiveness of big data through pilot programs and quick wins, dispatching credible champions for the transformation, and showing how big data improve personal performance are among the tools that can bring frontline staff on board.

In one example of the potential value, an Asian telecommunications company worked diligently to get frontline staff to heed next-product-to-buy recommendations offered by analytics. As a result, conversion rates increased by about 15 percent for in-store sales and by about 13 percent for inbound telesales. Tests with outbound telesales, direct mail, and outbound text marketing showed even greater results, sometimes as high as a twofold increase.

To a point, big data analytics deserves the excitement it has generated. By capturing the value of their stockpiles of data, companies have increased sales, reduced churn, and acquired other significant benefits. But companies have also been carried away by the hype, focusing on the technology rather than the new technology's strategic justification.

The real advantage of big data analytics starts with proven business cases. Then spear fishing can begin; the technology can be deployed to attack a specific problem or to seize a specific opportunity. As business cases and successes pile up, big data analytics becomes part of a company's core operating procedures, delivering its greatest value.

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