



Building IT Capabilities to Deliver Better Insights

Technology alone won't solve a company's analytics issues, but here are three no-regrets actions that CIOs can take to move ahead.

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Any CIOs who have heard their business executives boasting about “going around IT” should be concerned for their jobs.

We hear this sort of thing frequently, particularly from executives who have been talking with technology vendors that promise to solve their analytics problems with new technologies that glean business insights from vast amounts of data.

And while it’s true that data and analytics will change the way companies succeed in almost every industry, no company can hope to fully benefit from analytic insights unless they undertake the hard work of building their internal capabilities for managing data and integrating the insights into operations.

Most CIOs and other senior IT executives know their organizations are not prepared to make full use of the waves of data coming into their organization. A Bain survey of 325 global companies found that 59% of those organizations believe they lack the capabilities to generate meaningful business insights from their data. In another Bain survey of 250 companies, 85% said they will require substantial investments to update their existing data platform, which includes consolidating and cleaning data, simplifying access and rights management, and improving access to external data sources.

Given that they understand how far they have to go, what keeps them from getting started? In our experience working with hundreds of companies around the world, we find that three major obstacles get in the way.

- **The divide between ownership and stewardship of data.** IT may not always know where the value resides in data, while executives on the business side may not understand the intricacies of data storage and management. This disconnect can have expensive consequences if the business (which owns the data) and IT (the data stewards) make decisions without a solid understanding of each other’s perspective.

Sometimes, point solutions from vendors can make the problem worse. In one case, business executives at a North American manufacturing company en-

gaged a vendor to consolidate various pools of data to provide essential insights. The IT team had wanted to invest first in fixing the underlying problem, which was a proliferation of different data systems resulting from years of acquisitions. The vendor’s analytics solution delivered insights, but also raised the cost of rationalizing the data later.

- **Overreliance on technology.** IT departments budget and plan in terms of applications and infrastructure, but data has always been at the center of the effort. Historically, IT departments focused on how and where to store data and how to keep it secure. But companies don’t create value by storing data or managing rights. Increasingly, value will come from making data available to the right people who can use it to derive insights and create business value.

It’s this last part of the equation—putting data in the hands of business people—where a lot of companies stumble. In many cases, they leave it up to IT to figure out how to create new value from data. Most IT organizations, though, were built with a focus on the T, technology, rather than the I. Previously it was enough to deliver comprehensive reports on current data sets, but today IT must work closely with the business to understand what’s possible and how the business can make the best use of data.

- **Old processes that no longer fit business needs.** Old architectures and processes may be out of date in the current business environment, where no one can predict who will want what data and for what purpose. Data platforms will need to evolve to support a wider range of use cases. For example, enterprise data warehouses used to be the centerpiece of data landscapes. These were treated as walled gardens, protecting a company’s most valuable data and restricting access to only a few—which is increasingly unworkable in organizations where many need to access the data, including those who may want to “play” with the data to make discoveries.

More sophisticated cases beg the need for more advanced architectures to access, integrate and vir-

tualize data sets for consumption and analysis. For these uses, cloud-based infrastructure can work better than on-premise systems because they can be scaled up, provisioned on-demand and paid for on a consumption basis.

Unfortunately, few organizations have a clear point of arrival and roadmap for their data platforms to support the massive growth of data along with the challenge of managing legacy systems; fewer have a well-defined, systematic approach to execute. And only the very best performers have established relationships between IT and the business that focus on generating valuable insights as the primary goal of technology. Most well-established companies need to critically review and re-vamp their plans and approaches to data management in order to optimize technology investments and reduce the likelihood of costly lock-in and inflexible proprietary point solutions.

No-regrets moves to support analytics

These barriers are common, but not insurmountable. Our work with organizations around the world shows that organizations can develop the capabilities to deliver effective data management in the age of advanced analytics. Sometimes, but not always, a change in technology management prompts the revitalization. But whether or not technology leadership has changed, there are several things any organization can do to begin to close the gap between their data capabilities and those of analytics leaders.

- **Continue to prioritize where technology will deliver the most value.** As IT executives begin to build up analytics capabilities, they need to continue to let business decisions determine investments. A process to explore the business opportunities can help discover where there's value and then use those insights to prioritize the investment in IT. A solid focus on long-term business priorities will help companies look beyond current fads and buzzwords and toward building sustainable analytics capabilities.

- **Upgrade while keeping a legacy system running.** The risk in prioritization based on business value is that it can make it difficult to address underlying issues that can affect productivity in the long term—such as different versions of customer data spread across multiple systems. Some of these are no-regrets actions that IT can act on immediately. Others may be further out of view, things that IT must do to unlock access to data—and which may not be tied to an urgent business need. Since in most companies the capital budget is tied up in “keeping the lights on” and responding to business demands, it can be difficult to place these in the work schedule, but finding ways to do so will return benefits down the road.

- **Change the ways of working.** Traditional data management processes—for example, extract-transform-load (ETL)—have served companies well in the past. But they break down when analytics and applications have real-time requirements. One way to keep up is to bring the business closer to the development process. Agile development methods, which build applications more incrementally with frequent input and review from the business, are an essential step in that direction. So too is the concept of DataOps: Just as DevOps improves efficiency by increasing collaboration between application development and operations, a DataOps mentality focuses the organization on improving the way that business leaders, data scientists and IT managers work together to discover insights.

Plenty of CIOs will fail to push their IT departments beyond traditional data management into a realm where their technology makes it easy for executives to access data and derive valuable business insights. Successful CIOs, however, will be those who move from a technologist's view to one that allows a broader swath of business users to access data, experiment with analytics and derive new insights that deliver meaningful value to the organization. 



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The authors would like to acknowledge the contributions of Sukumar Kalmanje, a senior data scientist with Bain & Company's Advanced Analytics Group in Silicon Valley.

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