

Fulfilling the promise of analytics

Get the most from big data and analytics: Second of two articles based on an EY-Forbes study emphasizing the human element.



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hile data and analytics have been part of business for a long time, it's only in recent years that the value they provide has captured the attention of senior executives and managers. That is because there has been an explosion of systems and devices that generate data coupled with greatly reduced costs to collect, store and analyze that data. The result: big data.

Today, big data and analytics (BD&A) are changing the way decisions are made

– from everyday business challenges to differentiating a company in an effort to gain competitive advantage. Decision-makers' eyes and imaginations are now open to new opportunities that might have slipped under the radar in the past.

However, for all the benefits BD&A promises, it is disruptive. And like all disruptive concepts, it can turn any organization on its head. In fact, because of the disruptive nature of BD&A, many companies are struggling to derive full value from their initiatives and capabilities. A



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recent [EY and Forbes Insights](#) survey of 564 executives in large global enterprises found that most organizations still do not have an effective and aligned business strategy for competing in a digital, analytics-enabled world. For many companies, the people- and process-related change management issues have prevented analytics from fully delivering on its potential.

Illustrating this challenge, the survey found that while 78 percent of organizations said data and analytics are changing the nature of competitive advantage, and despite the 66 percent who said they are investing \$5 million or more in

analytics, only 12 percent of organizations described themselves as analytics leaders. The reason so few companies class themselves as leaders, or are able to drive competitive differentiation, is because of the 89 percent that admitted that change management is the biggest barrier to realizing analytics' value.

What separates these leaders in analytics excellence from those organizations still struggling with their programs?

The EY-Forbes survey found that the most advanced companies – those within the top 10 percent in the survey results – use BD&A in their decision-making “all

of the time” or “most of the time” and said they considered their organization as “advanced” or “leading” in applying BD&A to business issues and opportunities. Further, these companies reported a “significant” shift in their ability to meet competitive challenges.

In other words, the top 10 percent of companies are not just producing data and analytics, they use the analytics-driven insights at the point at which decisions are made. The ability of an organization to utilize, or as we refer to it, “consume,” analytics like this is not easy. Most companies have rich BD&A production strategies and processes in place – a topic that warrants another article for another day, but driving BD&A consumption throughout the organization has proven to be challenging.

For many companies, being able to consume analytics requires an entirely new mindset – moving from viewing BD&A as simply a technology issue to viewing it as a powerful business tool. To do this, companies must consider the human element of analytics.

The human element focuses on why, despite all the data available, analytics insights are not used. Are employees not aware of the data? Do they not understand it? Are they not trained on how to access it? Are the right analytics insights reaching the right people at the right

time? Or, perhaps they are but the insights are dismissed because they tell an inconvenient or unbelievable truth.

Many companies are hitting the reset button on their BD&A initiatives to take the human element into account. But this is often easier said than done. To ensure that organizations receive the highest return on investment from their programs, three key areas should be considered:

- **Strategy.** What strategy should an organization adopt in the face of disappointing returns on analytics investments? How does a company shift from analytics being a technical issue to a strategic business imperative?
- **Leadership.** What leadership does a company need to have in place? Both at the senior level and at the operational level throughout the organization?
- **Consumption.** How are analytics insights consumed, both at the individual and the organizational level?

CREATING STRATEGY THAT CAN WIN IN A BD&A-ENABLED WORLD

Without a strategic approach providing high-level guidance, analytics efforts are rudderless. The first step in steering the ship is to articulate a vision for the role of analytics.

Perhaps unsurprisingly, when we asked “what best describes the state of your organization’s overall strategy toward data and analytics?” we found that the most successful companies – the top 10 percent – say that analytics is central to their overall strategy. These organizations may have data scientists and analysts on staff, have identified targets for analysis and even talk about being an “analytics-driven enterprise” in their mission statements and annual reports. But enabling the organization to leverage analytics requires more than introducing technology or launching new programs. It is about having the organizational alignment, the governance and the culture to harness the transformative potential of analytics to guide the organization to success.

Organizations leading the way in this area are formulating and acting on their visions in a tangible way. The top 10 percent of companies, “the best” in the survey, scored an average of 22.6 out of a total score of 25, compared with 12.6 percent for “the rest.” Clearly, the ability of organizations to define themselves in terms of analytics capabilities ranges widely. The transformation to an analytics-driven enterprise requires the integration of many components and a common purpose and vision. This is where strong leadership can make a difference.

ANALYTICS LEADERSHIP REQUIRES A RENAISSANCE PROFESSIONAL

When analytics needs to be at the heart of the business strategy, it’s logical that the analytics leader needs to be proficient in business as well as the technical aspects of analytics. While it might be logical, many organizations have struggled to install the right person at the head of their analytics programs. That’s in no small part too because it’s tough to find an individual with the rare blend of talents required.

An analytics leader must have sound knowledge of data management fundamentals such as data extraction, data quality and developing data architecture. They must have an advanced understanding of the mathematic disciplines that underpin analytics as well as the enabling technologies. They must be able to effectively translate, using visualizations, what the data are saying into a compelling story that will create action among other senior leaders. And they must have an intimate knowledge of the business and the industry landscape, coupled with a hunger to innovate new products, process, or, in order to achieve competitive differentiation, an entirely new business strategy.

The survey results illustrate this need for a multi-talented individual, with the top 10 percent of firms listing new revenue streams, sector knowledge/experience, statistical proficiency, and data extraction

and transformation as some of the most important things they look for in their analytics leader. Finding an individual with all the necessary skills ([watch this video for more](#)) is not easy. That's why those who do combine these skills are in high demand, with the corresponding high salaries.

ENHANCING BD&A CONSUMPTION ACROSS THE ENTERPRISE

Analytics consumption takes place at two levels in an organization: senior-level executives and other decision-makers gain insights to help them understand their markets, product or service positioning and operations. Individual employees at all levels and locations throughout an enterprise can

use analytics to help improve their own decision-making.

The top 10 percent of companies in the EY-Forbes survey scored an average of 77 percent for organizational consumption, with the rest of the companies scored an average of only 51 percent. As with strategy and leadership, the top companies are “getting it right” when it comes to data consumption, and this is reflected in their bottom lines. Industry sectors leading the way in enabling analytics consumption organization-wide include technology and consumer products and retail.

But even for leaders, BD&A is as much an art as it is a science. A successful analytics environment does not

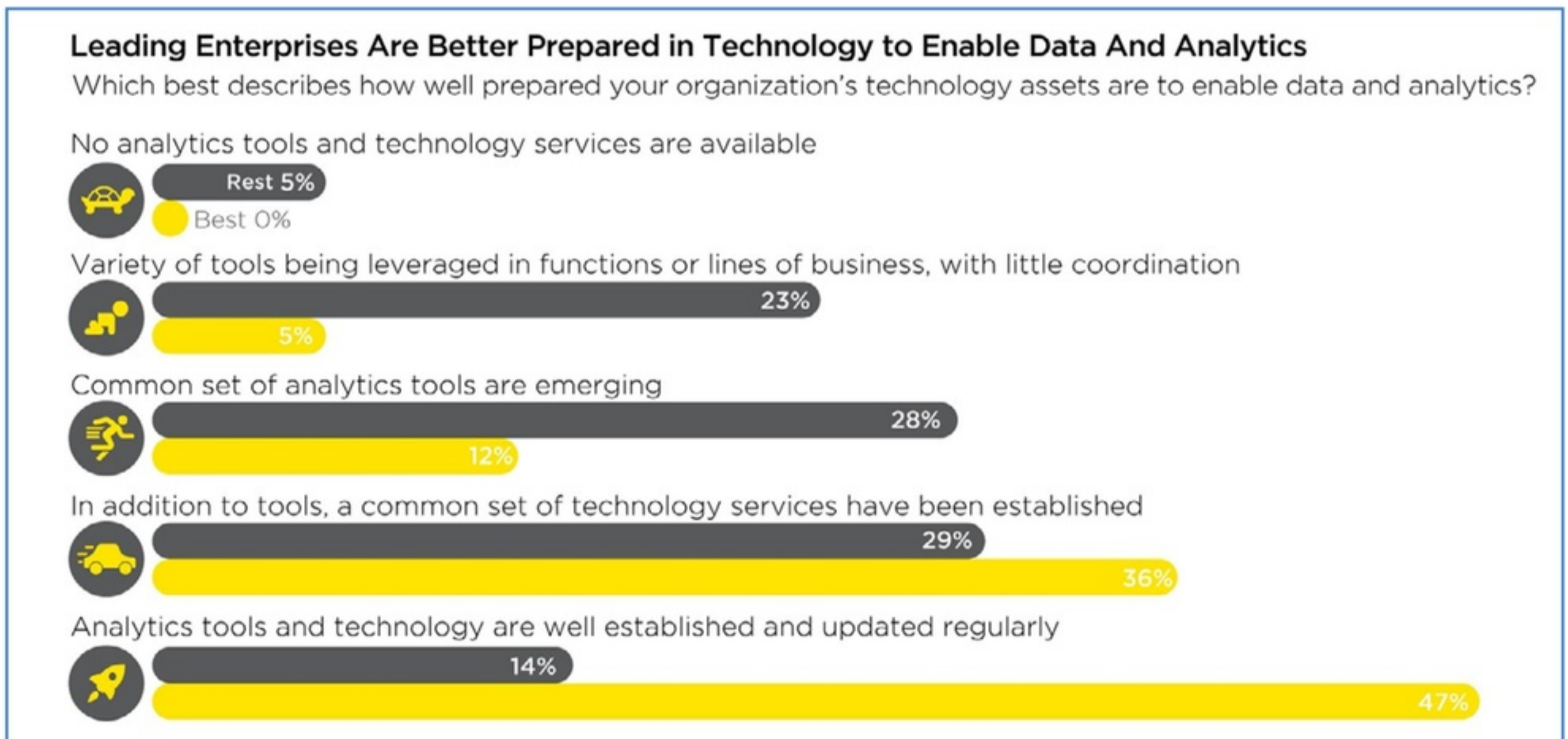


Figure 1: Based on a recent EY-Forbes study, for a majority of organizations the tools and technologies they employ to leverage data and analytics are either immature or have yet to be standardized.

Source: EY study: "2015 EY/Forbes Insights Data & Analytics Impact Index: Don't Forget the Human Element"

Leading Enterprises' Data Management Capabilities Are Designed to Support Data And Analytics

Which best describes your organization's data management capabilities designed to support data and analytics?



Figure 2: Data and analytics skills are becoming essential to a myriad of jobs and business roles.

Source: EY study: "2015 EY/Forbes Insights Data & Analytics Impact Index: Don't Forget the Human Element"

depend on technology alone; it requires marshaling human capital to deliver the right insights at the right time. As noted earlier, any transformative initiative requires support from the top, but employees at all levels must also buy into the effort. They must also be trained so they can effectively understand and use analytics (see Figures 1 and 2 for how leading companies recognize, monitor and support their staff). The value of analytics comes from the behavioral alignment required to "consume" analytics in order to move from insights to action to creating value.

A BRIGHTER FUTURE

Competitive advantage over the coming years will depend on how well companies in all industries embed analytics into their enterprise-wide business strategy and decision-making. When a company

puts analytics at its heart, seismic changes can take place.

The pace of that change in any given organization will depend on two factors: First, the sense of urgency with the organization, typically driven by how rapidly the competitive landscape of the organizations is changing. And second, having the right leader in place who can implement the right organizational structure and governance that will embed analytics at the point decisions are made. Only then can organizations finally realize the promise of BD&A and secure the competitive advantage they need to succeed. |

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