

The Current State of Business Analytics: Where Do We Go From Here?



Executive Summary

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Is Business Analytics Overrated?

Since the 2007 publication of Tom Davenport's book, *Competing on Analytics: The New Science of Winning*, businesses have become sold on the notion that they must make use of their data to derive insight. Many organizations have jumped on the analytics bandwagon in recent years. In fact, according to a recent survey by Bloomberg Businessweek Research Services, 97% of companies with revenues of more than \$100 million are using some form of business analytics, up from 90% just two years ago.

But while businesses have warmed to the idea of fact-based decision-making, a steep learning curve remains. Only one in four organizations believes its use of business analytics has been "very effective" in helping to make decisions. This is a far cry from the competitive edge promised in all the hype around analytics, clearly raising the question: **Is business analytics overrated?**

A Bloomberg Businessweek Research Services study, conducted among 930 businesses across the globe in various industries, provides insight into the current state of business analytics in today's organizations. It also examines the challenges companies face when using analytics, and explores tactics favored by companies who have succeeded in using analytics more effectively than their peers.

The following are research insights about the current state of business analytics:

- Business analytics is still in the "emerging stage." While business analytics has gone mainstream, most organizations still rely on traditional technology. Spreadsheets are the number-one tool used for business analytics.
- Organizations are proceeding cautiously in their adoption of analytics. Use of business analytics within companies has grown over the past year, but at a moderate rate. Analytics also tend to be used narrowly within departments or business units, not integrated across the organization.
- Intuition based on business experience is still the driving factor in decision-making. Analytics is used as part of the decision process at varying levels, depending on the organization.
- Companies are looking to analytics to solve big issues, with the primary focus on money: reducing costs, improving the bottom line, and managing risks.
- Data is the number-one challenge in the adoption or use of business analytics. Companies continue to struggle with data accuracy, consistency, and even access.
- Many organizations lack the proper analytical talent. Businesses that struggle with making good use of analytics often don't know how to apply the results.
- Culture plays a critical role in the effective use of business analytics. Companies that have built an "analytics culture" are reaping the benefits of their analytics investments.

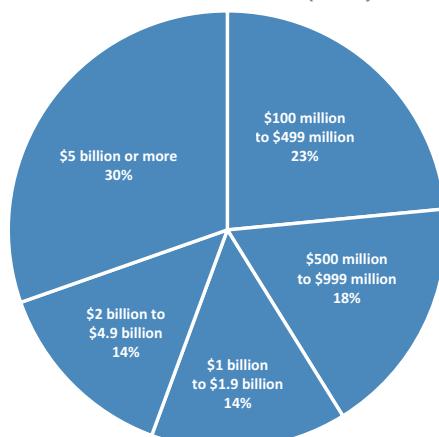
Background and Methodology

Bloomberg Businessweek Research Services launched a research program in May 2011 to determine the current state of business analytics in today's organizations. The research program was designed to understand how far organizations have come in their use of analytics and to assess the role of the "analytics culture" in driving data-based decisions.

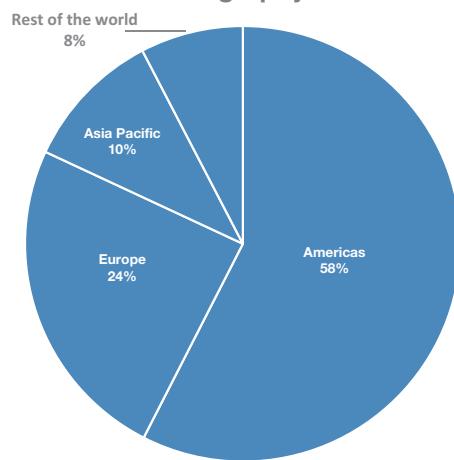
This white paper, "The Current State of Business Analytics: Where Do We Go From Here?" reviews a portion of the research and provides analysis and insights on the topic of business analytics. It is the first of a series of white papers intended to facilitate sharing the most important insights from the research.

This paper is based on the findings from an online survey of business professionals who are members of the Bloomberg Businessweek Market Advisory Board, an online panel of 20,000+ professionals. Overall, 930 respondents across the globe were surveyed in April and May 2011, including all levels and functional areas of the organization. Comparisons are also drawn between the findings of the 2011 survey and a similar research program conducted in the same manner in April and May of 2009.

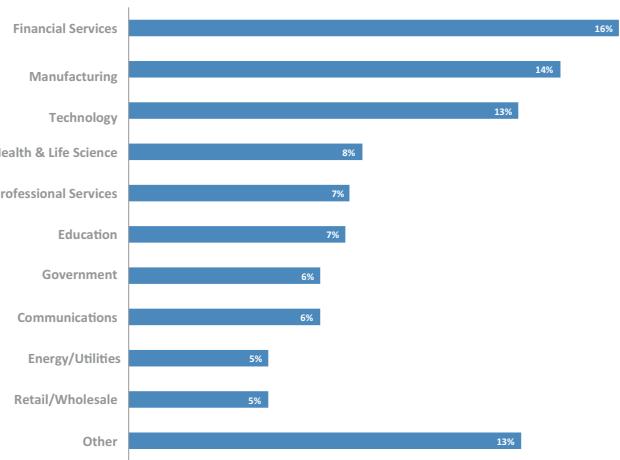
Annual Revenue (\$US)



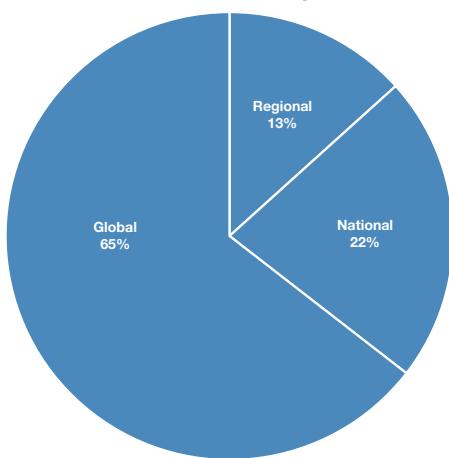
Geography



Industry



Business Scope



Introduction

Since the 2007 publication of Tom Davenport's book, *Competing on Analytics: The New Science of Winning*, businesses have become sold on the notion that they must make use of their data to derive insight. The term "business analytics" now defines technology that uses data analysis to understand business issues in a way that can guide decision-making. The effective use of business analytics has been shown to provide companies with a competitive edge.

Subsequently, adoption of business analytics has seen a significant upswing in recent years. According to IDC (International Data Corporation), business analytics is one of the top two IT priorities for large enterprises this year.¹ More companies are recognizing the value of their data sources and seeing the need for data-driven decisions. In fact, only 3% of the 930 respondents in the Bloomberg Businessweek global survey indicated that their organizations do not use any form of business analytics, versus 10% in the 2009 study on the same topic.

But the adoption of these business analytics technologies bears a steep learning curve, as companies move to establish an analytics culture in which data-driven decisions are standard practice. The key issues addressed by this research are:

- How far have organizations come in capitalizing on the use of business analytics?
- What differences exist between those companies getting high value from analytics and those that have not yet reached that level?

¹ International Data Corporation, "IDC's Worldwide Business Intelligence Tools Tracker Finds the Market Surpassed \$4 Billion in Revenues in the Second Half of 2010 with Further Growth Expected in 2011," news release, June 27, 2011, <http://www.businesswire.com/news/home/20110627005197/en/IDCs-Worldwide-Business-Intelligence-Tools-Tracker-Finds>.

The Current State

Business analytics has gone mainstream but are still in the “emerging stage.”

Still the old standards. Though business analytics have become widespread, with 97% of the respondents in the survey reporting some form of use, there is no universally agreed-upon definition of the underlying technologies. In fact, organizations still view business analytics rather narrowly—primarily as reporting tools (dashboards and Key Performance Indicators) or forecasting—technologies that have been around for a while.

And when it comes to use, most organizations still rely on those old standards. Spreadsheets continue to be

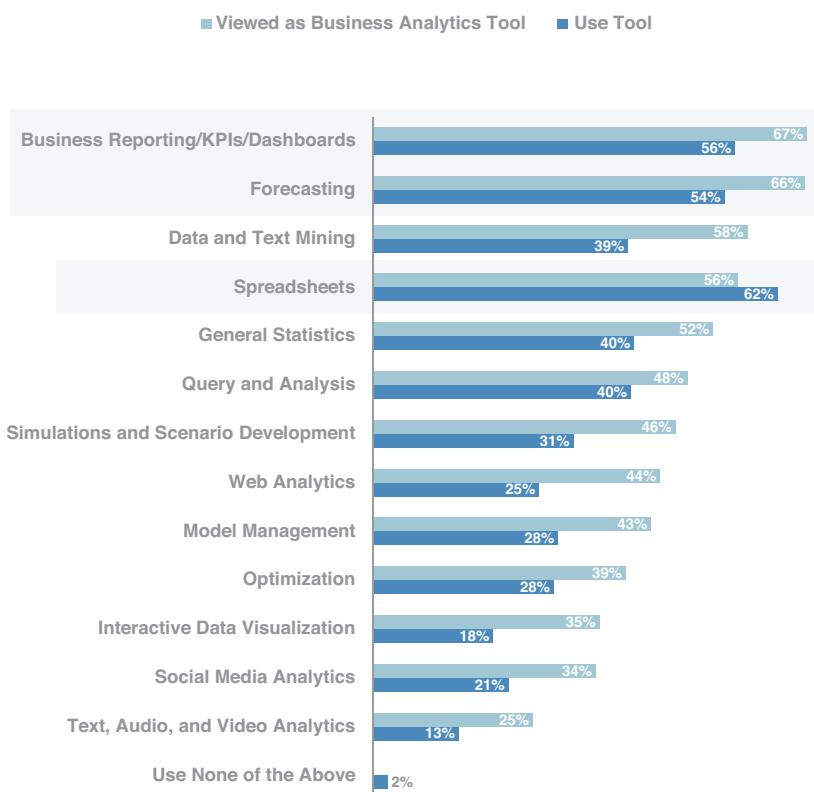
the most commonly used tool for business analytics (Figure 1). Dashboards/KPIs and forecasting rank second and third in use.

The vast majority of companies are not yet taking advantage of the more sophisticated analytical capabilities available. Newer technologies that capitalize on evolving sources of information (such as web data, social media, and unstructured data from text, video, and audio) are in the very early adopter phase, with usage by fewer than one in five businesses.

So while organizations have warmed to the idea of utilizing their data for insights, most remain at the fundamental level in their use of analytical tools—a clear indication that business analytics is in the emerging stage.

Figure 1

Which of the following would you consider to be business analytics capabilities/tools?



Organizations are also primarily using business analytics in areas where reliance on quantitative information is typically more prevalent: specifically, strategic planning, as well as finance, marketing, and information technology. These functional areas address issues that, by their nature, require analysis and prediction (Figure 2).

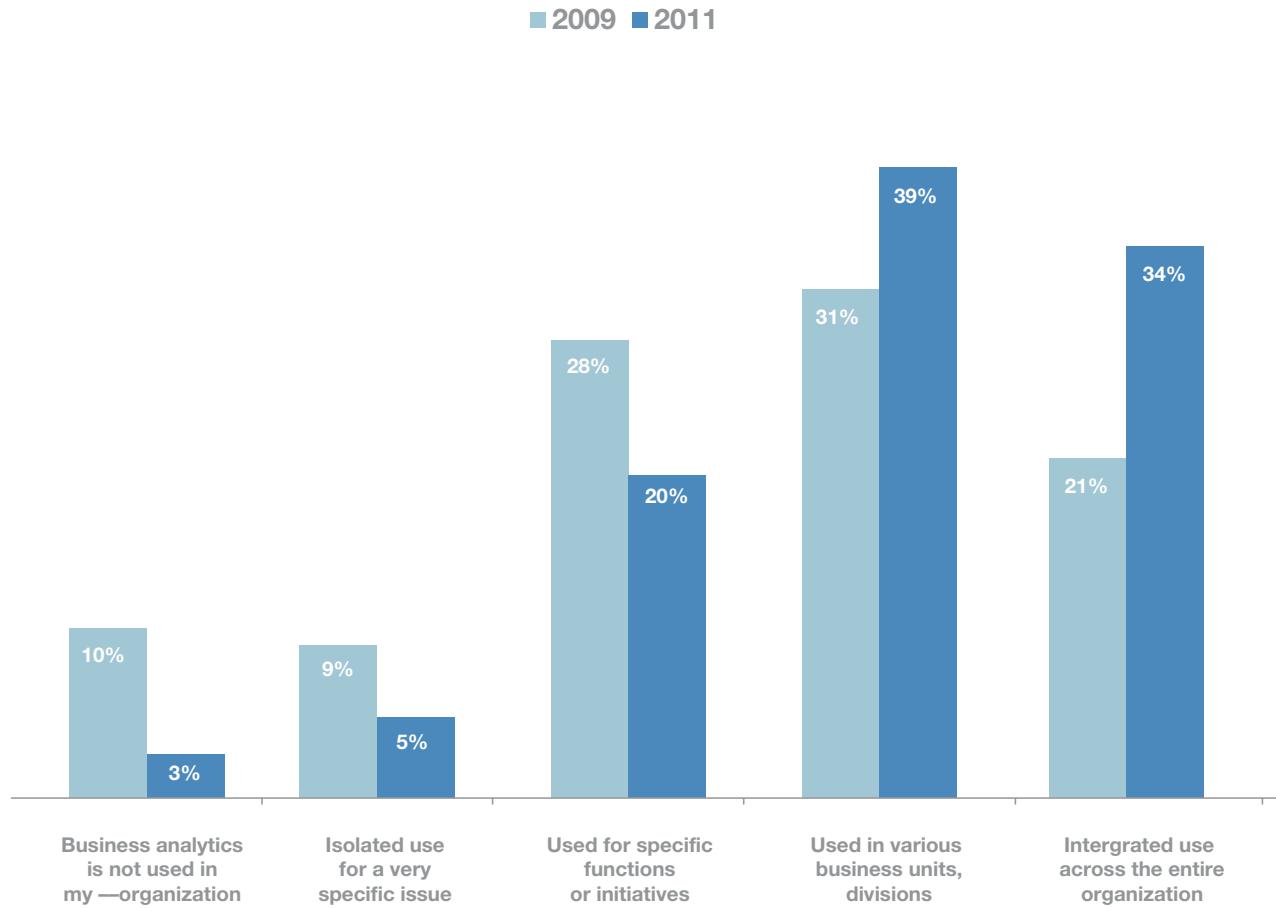
Figure 2

Which of the following areas in your organization are currently using business analytics to address internal or external business initiatives?



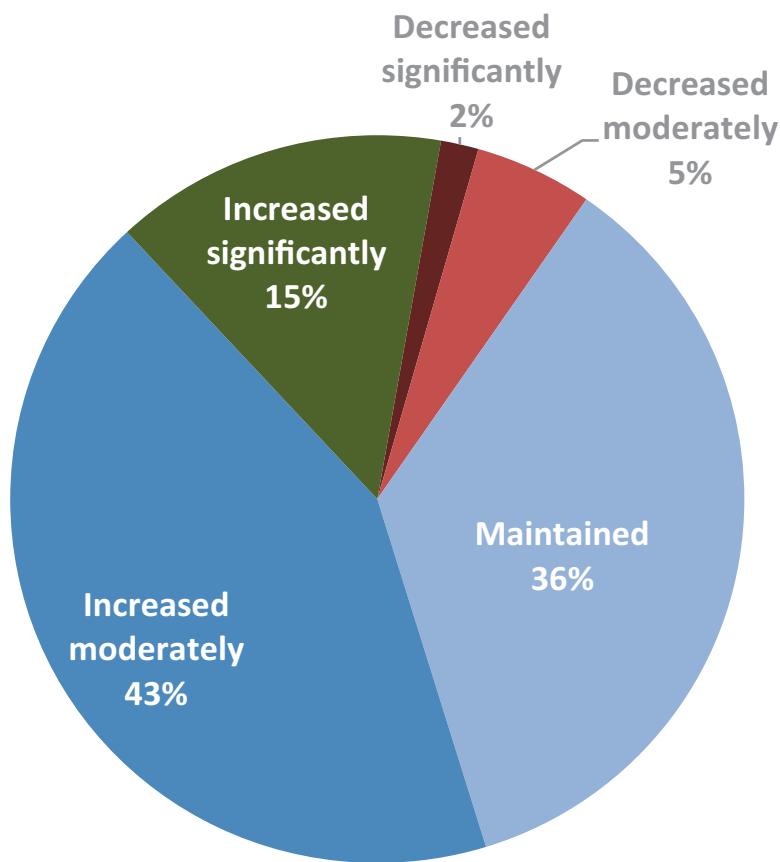
An incremental approach. Typically, new ways of doing things are not implemented across an entire organization in one fell swoop. It's no different for driving decisions with analytics. Often companies pilot programs to address a specific need and then expand the programs as they prove effective. This seems to be the case with most business analytics deployments. Implementations are often started in response to a specific issue or *within* one area of the organization. As analytics move through the “emerging stage” and prove their value, adoption within the organization continues to spread.

Figure 3
Which of the following describes the use of business analytics across your organization?



Moving up the curve. Findings from the current study contrasted against those from 2009 show that organizations have definitely evolved in their use of analytics over the past two years. Analytics use has moved further across the organization as a whole. Few companies are still at the initial stage of using business analytics solely to address a specific issue (5% today vs. 9% in 2009) or simply for a specific function or initiative (20% vs. 28%). Four in ten are now using business analytics across functional areas and business units. Integration *across the organization* jumped from 21% in 2009 to 34% this year—a very strong bellwether of maturity (Figure 3).

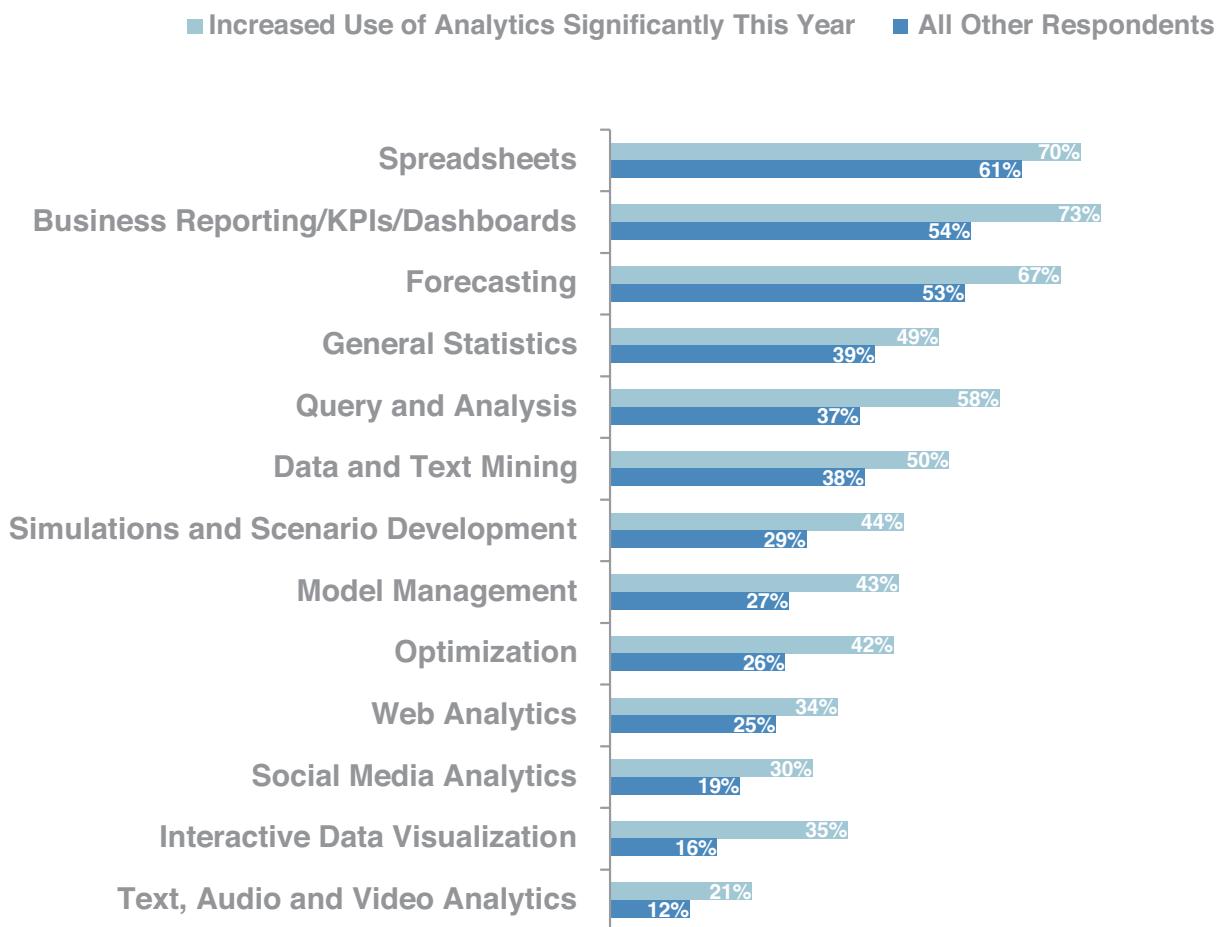
Figure 4
How has the overall usage of business analytics changed in your organization over the last 12 months?



Proceeding with caution. Another indication that business analytics linger in the emerging stage is that most organizations are proceeding somewhat cautiously as they expand use. While a total of 58% of companies reported increasing their use of analytics this year, most of these indicated that the increases in use were only *moderate*. An additional 36% maintained the same level of use as last year. (Figure 4)

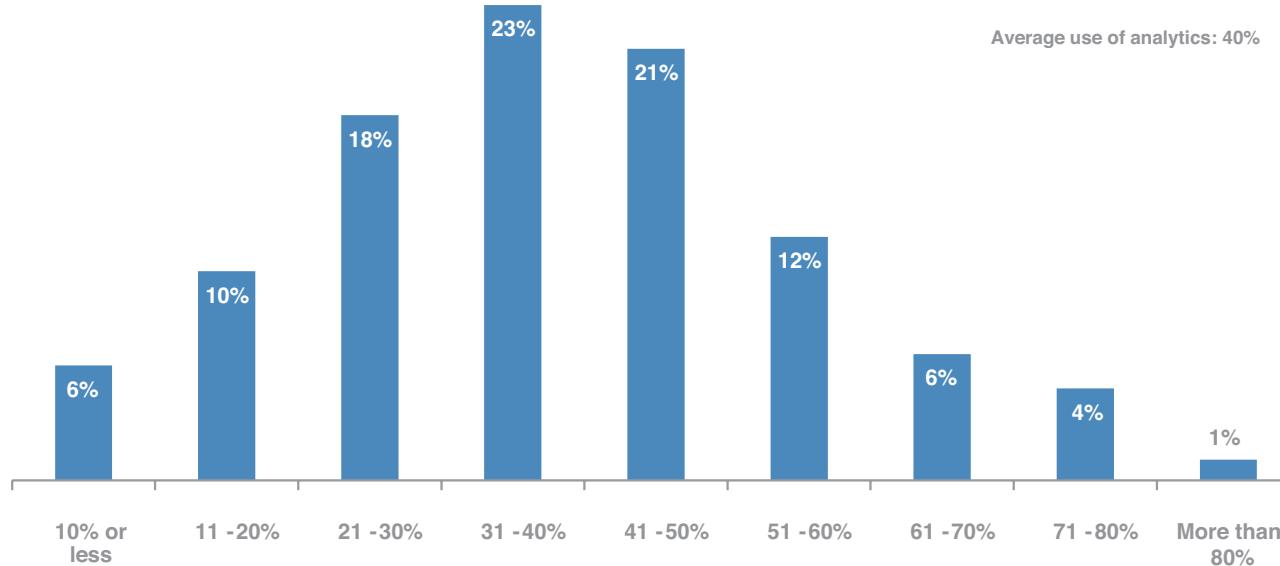
Figure 5

Which of the following capabilities are currently being used by your organization?



A core group of early adopters. There is a small group of organizations (15%) that reported significant increases in use of business analytics this year. This group shows higher use of analytics tools compared to all other respondents across the board. These “early adopters” lie at the forefront of the emerging business analytics initiative. (Figure 5)

Figure 6
Percent Use of Analytics in Decision Making



Business experience still trumps analytics. As previously established, businesses believe in the concept of using analytics to drive decisions. More than half of the companies in the survey say that they rely heavily on data and metrics when making decisions. But even as analytics gain broader use across the organization, intuition based on business experience still tips the scale when it comes to decision-making.

On average, the ratio of intuition to analytics is 60/40, according to survey participants. While organizations recognize that business analytics provide additional insight for decision-making, survey results seem to show that analytics cannot fully replace experience and knowledge. In fact, fewer than one in four of the respondents reported using more analytics than intuition to drive decisions. (Figure 6)

Of course, the intuition/analytics mix will vary depending on the decision at hand. The most important insight here is that companies are seeking the proper balance for their businesses and their cultures as they mature in their use of analytics.

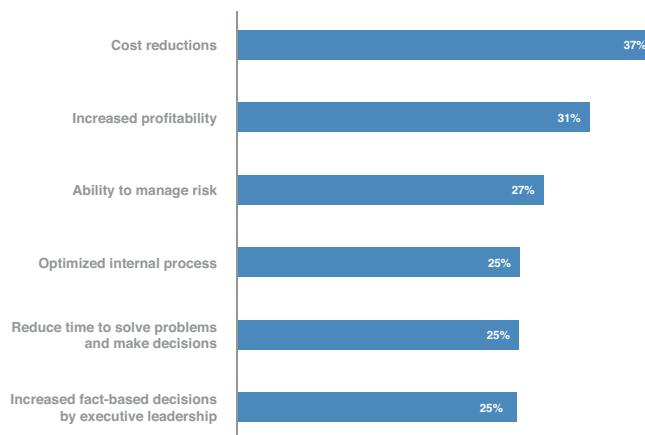
Desired Outcomes

Companies are looking to business analytics to help solve big issues.

Money talks. The hype created by vendors and the media about the wonders of analytics has led to high expectations. Companies are looking to analytics to help them solve a variety of critical issues; but the primary focus is on money. According to respondents, the top three issues for analytics to solve are: reducing costs, improving the bottom line, and managing risk (Figure 7).

Figure 7

Please select the five most important areas your organization is addressing or hopes to address with business analytics.



Business at the speed of life. Companies want to optimize processes to do things more efficiently. They also wrestle with making timely decisions based on the overwhelming amount of information available to them. With real-time sources of data demanding complex business processes and prompt reactions, it is no longer sufficient to take months or weeks to analyze information. Businesses are turning to analytics to optimize internal processes and reduce the amount of time required to solve problems and make decisions.

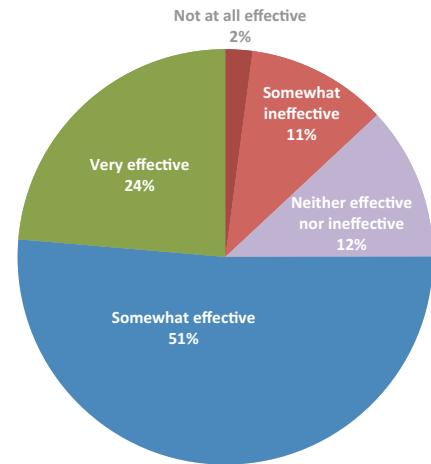
If we build it they will come. Many organizations are also expecting their business analytics investments to create a sea change—to increase fact-based decision-making among their executive leadership. These companies are using a grassroots approach, hoping to impact culture by providing the foundational tools and proving the value of analytics.

Not Quite There Yet

Most companies haven't turned the corner on their analytics investments.

Disaster or disillusion? The cold, hard truth is that many companies are not yet reaping the benefits promised in all the promotion of analytics. Only one in four respondents reported that the use of business analytics has been *very effective* in helping them make decisions. Granted, an additional 51% of the respondents of the survey view analytics as somewhat effective, but this is a far cry from the competitive edge proclaimed in all the current hype (Figure 8).

Figure 8
How effective would you say the use of business analytics has been in helping your organization make decisions?



So is something preventing these companies from experiencing the full benefits of their analytics investments? Or is business analytics overrated?

It's not just the software. Even though most companies aren't gaining maximum value from their use of analytics at this point, the research clearly shows that the value is there to be had. But the software alone can't provide the benefits. A key ingredient in the successful use of analytics is *culture*. Companies whose executives have a strong appetite for fact-based decisions tend to be much further along in building their analytics culture, and as a result, they are quicker to reap the benefits of business analytics. That said, respondents to this survey highlighted several cultural issues:

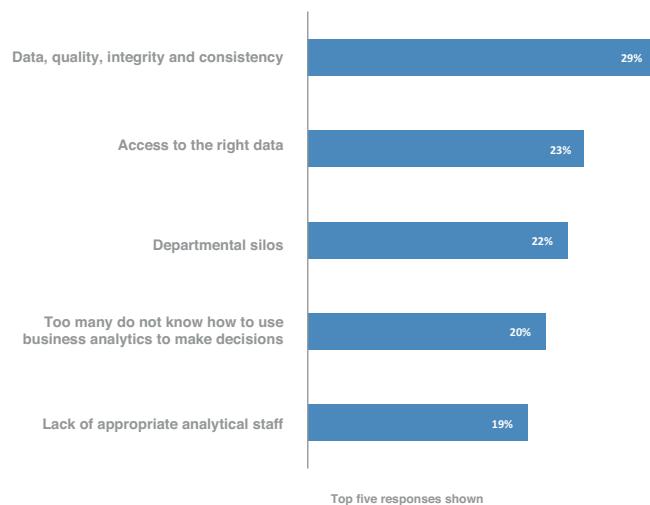
- **Lukewarm trust levels.** Just 58% of the respondents believe their executive management trusts the results of business analytics.
- **Going it alone.** Four in ten respondents say they can't get others on board using analytics.
- **Bottom-up approach.** The use of analytics has been a grassroots effort in 39% of the companies surveyed.

Additional Analytics “Roadblocks”

Data, process, and people pose the three biggest challenges in getting business analytics right.

It's all about the data. Like the old IT saying “garbage in, garbage out,” the insights gained from business analytics are only as good as the data entered into the tools. Though a decades-old problem, data management is the number-one challenge companies face in their use or adoption of business analytics, according

Figure 9
Please indicate which of the following are the three biggest challenges in the adoption or use of analytics in your organization.



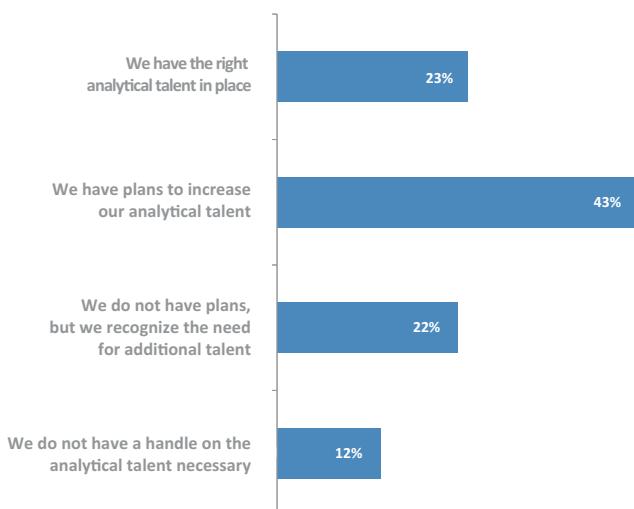
to our respondents (Figure 9). Issues include data quality, consistency, integrity, and—a fundamental issue—access. With the explosion in the sheer quantity of data companies are now able to collect, this will only get worse. Myriad data sources and repositories make it difficult to keep data consistent and accurate. Before achieving the effective use of business analytics, companies must take a hard look at their data-management strategies.

Deadly silos. Aside from the top two data-related issues, “department silos” rank third in the challenges businesses face in their business analytics deployments. In the majority of companies, information is not shared consistently across the organization, nor is data readily available to those who need it. Companies are also constrained by a lack of integrated processes—operating within the department/functional unit level—which is a death knell to effective analytics across the organization.

Mind the gap. Only 23% of the respondents feel they

Figure 10

Which of the following best describes your organization's current state of analytical resources?



have the right analytical talent in place (Figure 10). With the increase in the adoption of analytics, it's no surprise that the demand for analytical talent has also grown, and it seems that current demand far exceeds the supply. Nearly half of survey respondents say their organizations place a premium on workers with analytical skills. Yet inability to use analytics to make decisions and lack of appropriate analytical talent are two of the main issues inhibiting companies in their business analytics initiatives.

Toward an Analytics Culture

Companies driving effective “analytics cultures” are reaping the rewards of business analytics

Staying the course. While the point of inflection—where value exceeds investment—still remains elusive for many companies, clearly they recognize that the shift to analytics is a long-term endeavor. Six in

ten businesses say that the use of analytics has had a positive impact on the way their organizations do business. Almost half of all business analytics initiatives are being driven by corporate objectives—a sign that the “analytics culture” of many organizations is making progress. The frustrations experienced with adoption of any new technology are present in business analytics, but organizations seem cognizant that the growing pains will be worth the investment.

Get the executives on board. Even though business analytics initiatives are typically incremental, getting the top brass to see the value will help drive a culture in which the norm is data-based decision-making. According to the survey, effective users of business analytics are nearly always (86%) in organizations where executive management places a great deal of trust in the results of analytics. Getting quick wins on important issues can help gain the confidence of senior management.

Data comes first. Before embarking on analytics initiatives, organizations need to assess the effectiveness of their data-management strategies. Those who have a solid approach to their data are more than twice as likely to have successful analytics programs. Viewing data as a strategic asset—and as the backbone of effective decision-making—is a key element to an analytics culture.

Get your “analytics” on. Organizations reaping high benefits from business analytics are boldly moving into new technology. They significantly increased their use of analytics over last year at nearly four times the rate of other companies. They also tend to be earlier adopters of newer forms of analytics (e.g., model management, optimization, web analytics). These organizations have a larger portfolio of analytics: 6.1 tools, on average, compared to 4.2 for all others.

Share the knowledge. In developing the analytics cul-

ture, “silo-busting” is essential. Information and data must be shared across the organization. People must have access to the data they need. Effective users of business analytics are much more proficient than their counterparts at collaborating and sharing information.

Integrate. Companies that take the next step beyond collaboration—integration across the organization—are well on their way to building a strong analytics culture. Integration is one of the key components in getting benefits from analytics. The “competitive edge” so often promoted in the marketplace really only comes when the organization takes a holistic approach to analytics. In nearly six of ten organizations with successful analytics initiatives, these programs have been integrated across the entire organization—as compared to 28% of all other companies.

Hire the right talent. Adoption of analytical tools without the right people to make the best use of them can prove to be a poor investment. In developing a functional analytics culture, the linchpins are people,

process, and infrastructure. Among effective users of business analytics, 83% either have the right analytical talent in place or they have plans to hire more, compared to 51% of other companies surveyed.

Find your equilibrium. The average mix of intuition to analytics in decision-making is 60/40. For those organizations using analytics effectively, the scale tips more toward analytics at 53/47 versus 62/38 for all others. So while there is no dramatic swing to the analytics side, the research suggests that the more an organization relies on analytics in the decision-making process, the more effective it will be. Where the optimal balance lies depends on a number of factors, including the organization, the tools, the people, and, of course, the decision itself. As each company builds its own analytics culture, its particular analytics equilibrium will take shape.

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