

BusinessWeek

RESEARCH

SERVICES

Driven by Data:

The Importance of Building a Culture
of Fact-Based Decision-Making



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Background and Methodology

In April 2009, BusinessWeek Research Services (BWRS) launched a research program to determine the attitudes and opinions of C-level executives with regard to the use and value of business analytics. The research program was designed to understand how companies can optimize business analytics to improve fact-based decision-making.

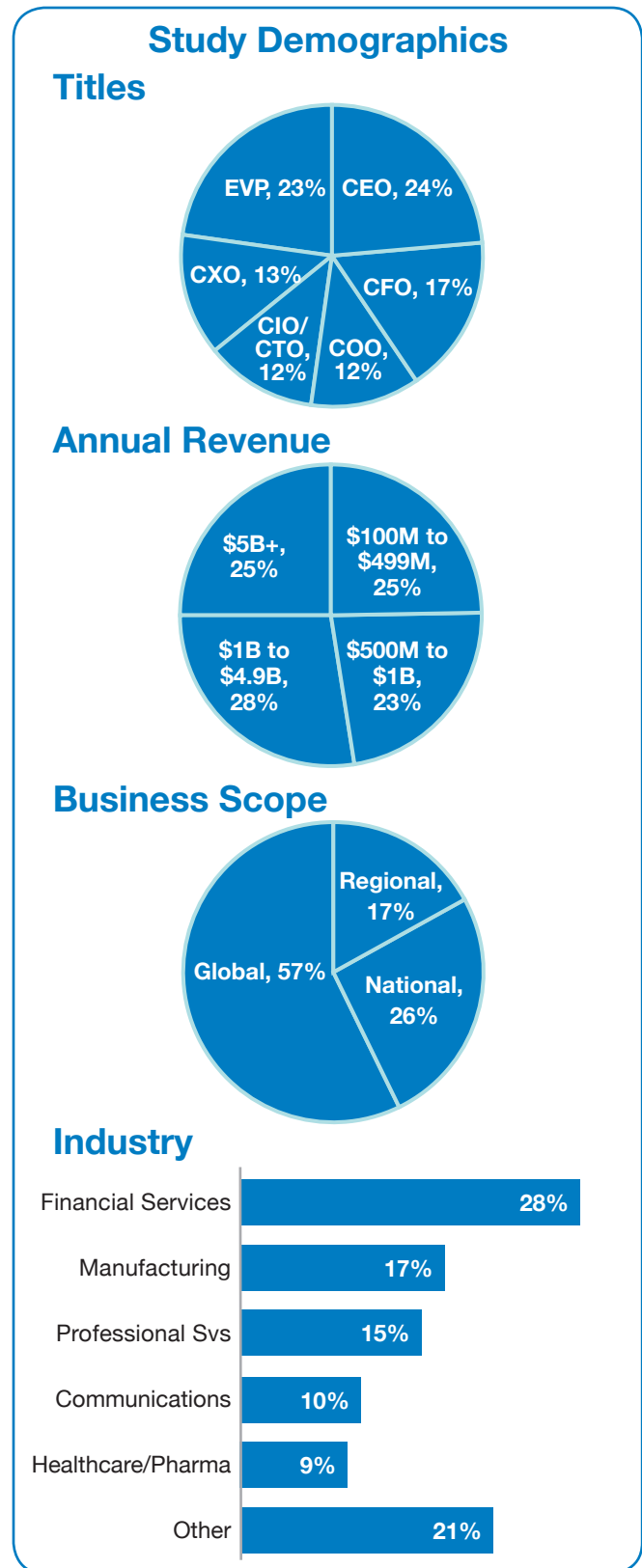
This white paper, “Driven by Data: The Importance of Building a Culture of Fact-Based Decision-Making,” reviews a portion of the research and provides analysis and insights on the topic of business analytics. It is part of a series of white papers for C-level executives intended to facilitate sharing the most important insights from the research. More data and insights are available at this exclusive Web site: <http://www.sas.com/whitepapers/index.html>

This research program is an online survey of C-level executives at leading large and midsize companies who are members of the BusinessWeek Market Advisory Board, an online panel of 20,000+ business leaders and executives. A total of 101 C-level executives across the globe were surveyed in April and May 2009 (see Chart 1).

For more information about the contributors to this research program, please visit: <http://www.sas.com/whitepapers/index.html>

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Chart 1



Executive Summary

- Though most executives say utilizing data has never been more important, many have not completely changed their ways to face the reality of the current economic downturn.
- The top benefits of adopting business analytics are: creating a culture of fact-based decision-making, managing performance, establishing a framework for decision-making, and aligning strategies.
- Some of the top obstacles to adopting business analytics are departmental silos, resource constraints, complex and diverse business demands, and too many “priorities.”
- The most important factors in creating an environment conducive to business analytics are executive sponsorship, establishing performance indicators, and shaping a culture supportive of analysis and metrics.
- While organizations are beginning to understand the importance of using data and analytics to inform decisions, they have not fully realized its potential due to a lack of data integration, data quality, and software inadequacies across relevant business practices.

Introduction: The Benefits of Business Analytics

Business analytics enables organizations to more accurately manage and react to changing conditions around them, and close gaps in information across the organization. Communicating goals across various departments and business units within an organization can be challenging. Many of the world's largest and most forward-thinking organizations find that even the complexity of bringing together a variety of talents across time zones can be demanding. One of the most difficult aspects of running a business, yet also one of the most important, is organizational cohesion and communication across departments and offices.

Nowhere is that more true than in the area of business analytics, with 83% of C-level executives agreeing that the importance of using information to effectively run a business has never been greater. Leaders have found that by escalating their ability to educate, communicate, and collaborate with their teams proactively about the health of the business, goals, strategies, and execution tactics using accurate and timely information, they can empower individuals and business units to solve priority issues faster...and evolve accordingly.

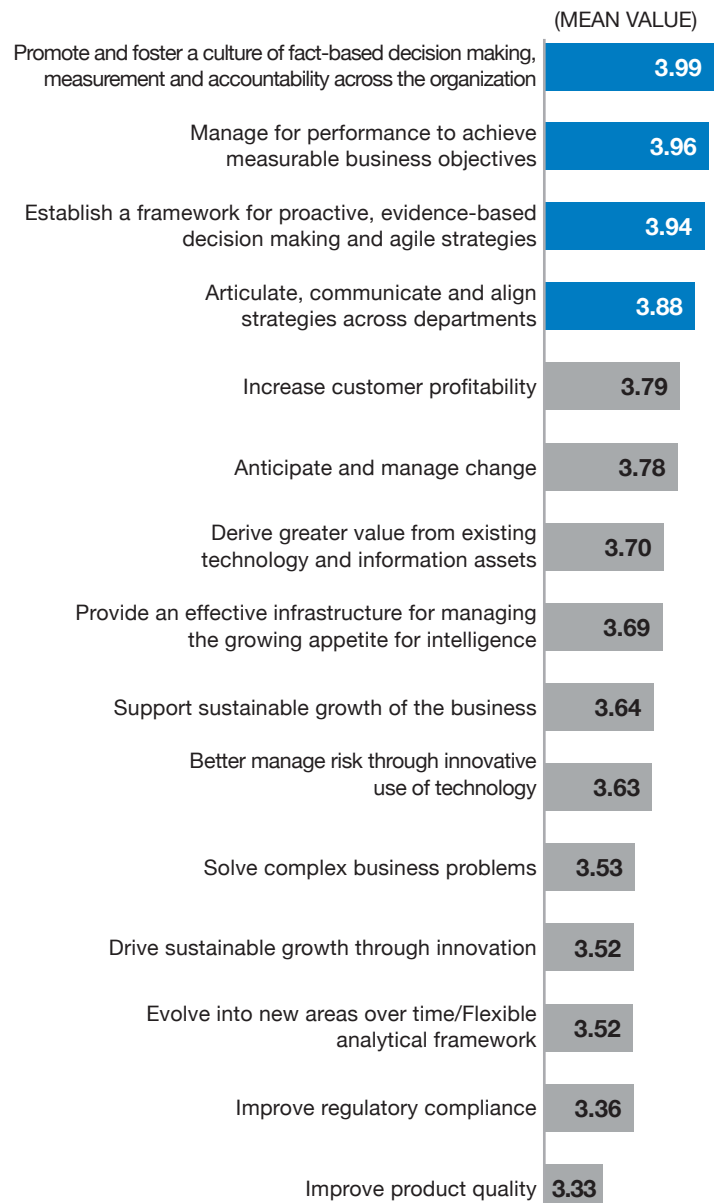
Adverse macroeconomic conditions have only started to result in operational shifts within a number of companies. Only about one in three organizations have completely changed the way they do business because of the latest economic downturn, indicating that organizations have yet to fully adjust substantially to the new business environment. Part of the new paradigm of doing business in a changing economy is adopting a structure where decisions are supported through business analytics, which has the potential to empower organizations to anticipate and manage change and make the best business decisions.

For C-level executives, the top benefits of business analytics are seen when organizations are working through internal management issues, such as creating a culture of fact-based decision-making, managing performance, establishing a framework for decision-making, and developing and executing agile strategies (see Chart 2).

Chart 2

Question:

The following is a list of the potential outcomes of business analytics initiatives. Please rate each in terms of the benefit you believe it provides to an organization on a 1 to 5 scale where 1 = No benefit; 5 = Great benefit



Despite this potential, business analytics is still not systemic across organizations. Though many organizations utilize business analytics in some operating units, the lack of widespread adoption suggests most are still in the early stages of learning how to integrate their disparate systems. However, thought leaders realize that successful organizations will be those that concentrate as much on the implementation and deployment of business analytics throughout their culture as on other corporate priorities.

Unlocking a Culture of Analytics: Leadership is the Key

Today's business environment requires that leaders develop consistent standards across the organization to ensure quality and operational excellence. This will require the adoption of new skill sets and behaviors, and implementing an appreciation for the business tools that can benefit an organization on both the micro and macro levels.

By delivering insights gleaned from data about customers, suppliers, operations, performance, and more, business analytics gives organizations the tools to solve complex business problems.

There's a major barrier, however: how an organization operates can impede its embrace of business analytics. Of the C-level executives surveyed, 88% said that departmental silos are considerable obstacles to successful execution of business analytics within their organizations (see Chart 3). Resource constraints were cited by 83% as being an additional impediment, with complex and diverse business demands (79%), too many "priorities" (79%), lack of data-driven collaboration (78%), and variable data quality,

integrity and consistency (76%) all mentioned as reasons why organizations aren't able to fully implement business analytics across the entire organization.

Chart 3

Question:

Please rate how much you consider the following to be obstacles to successful execution of business analytics?

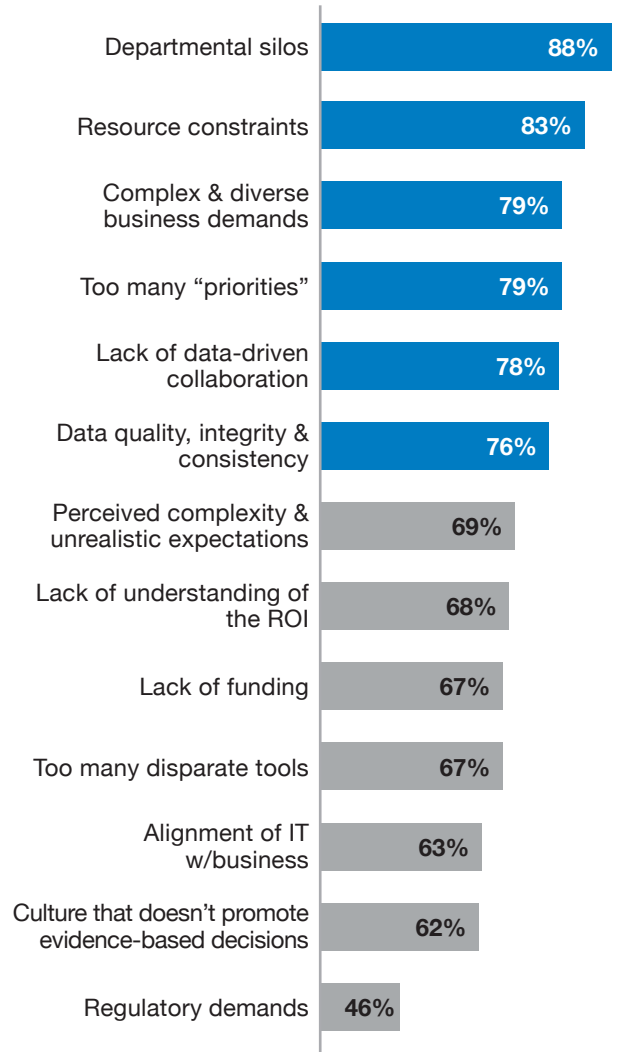
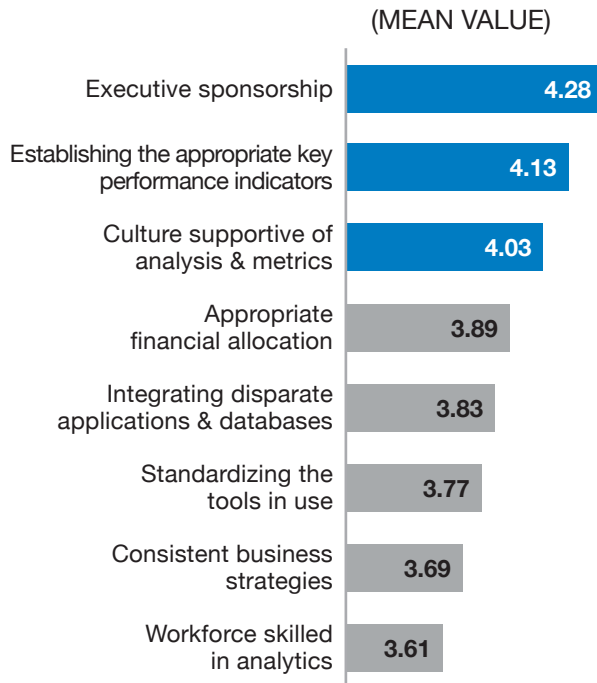


Chart 4

Question:

In your opinion, how important are the following factors in setting up an environment conducive with business analytics? Please rate the importance on a scale of 1 to 5 where: 1 = Not important at all; 5 = Very important



Industry leaders recognize that organizational readiness and transparency across leadership, process, infrastructure, personnel, and culture must be addressed in order to more broadly adopt and utilize business analytics. Leadership is the key to ensuring that business analytics is implemented throughout an organization. It is hardly surprising to find that C-level executives who have implemented some form of business analytics framework indicate that the three most important factors in creating an environment conducive to business analytics are executive sponsorship, establishing the appropriate key

performance indicators, and shaping a culture supportive of analysis and metrics (see Chart 4).

When asked about the link between business analytics and their organization, the response of one thought leader in particular exemplifies the sense of urgency among C-level executives: “Information is the lifeblood of our organization. We will continue to optimize availability and quality to all personnel.”

Walking the Walk: Making Business Analytics a Reality

Corporate cultures are unique but are not definitive of the attributes or potential of the organization, and are fully capable of being changed. A company’s culture largely comes down to its mission and making sure that mission is communicated throughout the organization. It’s natural for employees to ask the basic questions of business life: What is our vision for the organization? What drives us? What are our strategies, tactics, and goals?

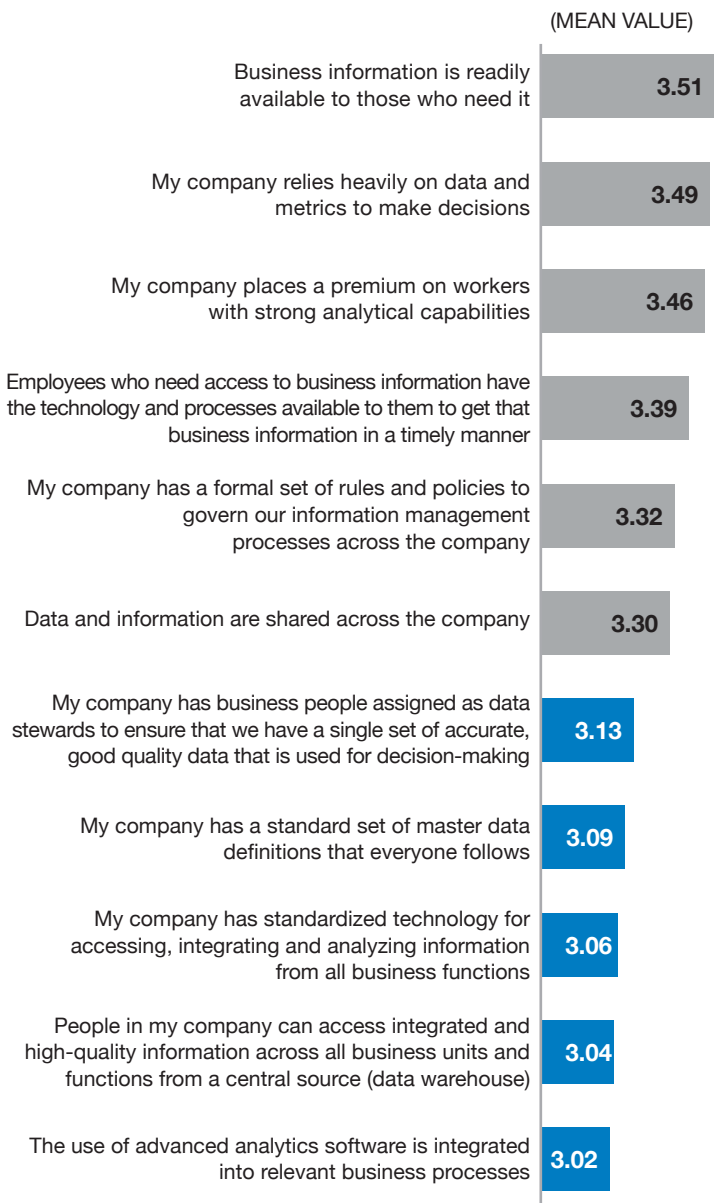
Business analytics can help shape and answer those questions but only if the organization embraces a widespread integration of business analytics from headquarters to outpost, C-suite to home office. Communicating a common set of values is an important first step in making sure that business analytics is woven throughout a business’s operations. A set of values can serve as a change-agent for business analytics behavior, and by instilling and applying these values within the organization, leaders can begin to change a culture.

While companies are beginning to talk through the advantages of business analytics, organizational abilities are still lagging. The evolution of a company’s culture toward a business analytics

Chart 5

Question:

Please indicate how well each of the following statements describes your company on a scale from 1 to 5. Use scale where: 1 = Does not describe my company at all; 5 = Accurate description of my company



framework requires reconciling how the organization sees itself in terms of its intelligent use of data with how it has prepared itself for the implementation process.

C-level executives indicate that organizations are starting to put a larger emphasis on fact-based decision-making. However, that information stands in stark contrast to the very weak responses from executives when asked if their companies had a standard set of master data definitions; standardized technology for accessing, integrating and analyzing information; people in the company who can access integrated and high-quality information across all business units and functions from a central source; or the use of advanced analytics software integrated into relevant business processes (see Chart 5).

With all the challenges that organizations face, it's understandable that internal forces and outside pressures could limit the adoption of a business analytics framework. However, there are ways to break through these obstacles. While companies are battling to stay in the game during the most difficult economic climate in nearly three generations, it's even more important for them to "walk the walk" when it comes to business analytics in order to receive the competitive benefits inherent in "smart" information.

The right leadership and organization-wide cultural adoption are the pathways to making business analytics a reality in organizations. It should come as no surprise that the top benefits of business analytics are focused on internal management issues, which include creating a culture of fact-based decision-making, managing performance, establishing a framework for fact-based decision-making, and aligning strategies (see Chart 2).

Conclusion and Recommendations

“Smart” companies understand that an integrated business analytics system provides a competitive advantage. By leveraging data, rather than simply collecting it, organizations can gain a deeper understanding of their business. However, in order to achieve this competitive advantage, they must break down organizational barriers through strong leadership, integrating systems and departmental silos.

This “silofication” is a common condition within large organizations, but it is not benign. Identity and multi-disciplinary communication are crucial, and to allow “balkanization” within an organization — where one division, brand, unit or office becomes an outlier — is to actively allow weak links in the chain. One of the best ways to combat this problem is by fully adopting a model of evidence-based decision-making that takes advantage of a business analytics framework.

In implementing this type of model, strong leadership is the main ingredient to ensuring that an organization becomes culturally adoptive and adaptive, embracing business analytics not as one more bureaucratic burden, but as a tool of operational execution and success. Executive sponsorship within organizations indicates that leadership is serious about changing the way business is done. Only through strong leadership that highlights the importance of validating actions and decisions with facts can an organization ensure that everyone understands how important it is to adopt a business analytics culture that will move their business forward.

Sponsor perspective –

SAS® and Business Analytics

A comprehensive framework for turning data into insight and effective business decisions

Imagine if your executive team said, “Our company’s core mission depends on making quality widgets,” and then, “Few of us believe we are any good at making widgets.” This would be a paralyzing scenario – one so obviously askew that sweeping changes would have to be made to get things on track.

Substitute an intangible commodity for a physical one, and this is essentially the message executives delivered to BusinessWeek Research Services in April 2009. Most C-level execs surveyed (83%) agreed that the importance of using information effectively to run their business has never been greater. At the same time, only 60% believe their organization is doing it well, and only 20% actually have the enterprise-wide agenda and infrastructure in place to do it well.

What gives? Are organizations so entrenched in operational and transactional systems that they have come to view data as king – instead of transforming data into meaningful information and predictive guidance? Have they bought into the idea that a patchwork of so-called best-of-breed solutions will yield the best insights – even if all those well-bred systems barely speak to each other? Have they settled for rear-view reporting as a compass for future directions?

It appears so. The survey showed that 30% of organizations use dedicated data analysis only within various business units, 27% apply analytics only for specific functions and initiatives, 9% for isolated specific issues, and 10% don’t conduct data analysis at all.

These figures are surprising given the current economic downturn. In less transparent, under-regulated and substantially richer days, organizations built a tolerance for a certain amount of inefficiencies, missteps and dead-ends. Times were good, credit flowed freely and budgets could take it. But lean times put the pressure on organizations to cut costs and preserve capital at all costs – while still growing the business. That’s a tall order, a nearly unachievable one unless the organization can extract every bit of informative value it can from its data resources.

Who are our most valuable customers? What are the right offers to make to them and when? What are the optimal price points and delivery channels? What are the risks of entering a new market or launching a new product? What are the real costs associated with transactions and business processes? Is human capital aligned with objectives? Have business decisions driven us closer to strategic goals? Will short-term cost-cutting undermine the company’s readiness for the inevitable rebound? Would we even know? What don’t we know? What can we anticipate and preempt? What’s the best possible outcome? What if?

Finding trustworthy answers to perennial business questions

The answers to those questions will not be found in the renegade spreadsheets that abound in most organizations – nor in simple “analysis” tools that simply sort, drill, filter, and rank. The answers will not

be found in scattered transactional and operational systems, or in patchwork reports cobbled together from disparate systems and databases.

Organizations need to bring those systems together into a cohesive framework — a *business analytics* framework. Now, formerly incompatible data sets can share their information — trusted, validated, and cleansed information — to be analyzed using multiple techniques. Analytically derived insights can be presented to varying groups of users with different skill sets and disparate requirements — where and when they need the information, in intuitive and graphical formats they can really use, in any environment that they operate within. Business leaders can exploit sophisticated analytical methods to truly understand the business, without having to become statistical gurus themselves.

With this kind of framework in place, you can understand the drivers of success in all facets of the organization, anticipate the impact of changes in key variables, measure progress toward divisional and enterprise objectives — and consistently deliver the value stakeholders demand.

Business analytics as a growing priority

For many enterprises, software investments are not aligned with business objectives or with their potential for returning bottom-line value. SAS has found that a typical enterprise spends 90% of its software budget on operational and transactional software — and a mere 5% on software that actually helps them understand all that data. Effectively, this means the organization focuses inwardly on processing information rather than on learning from the data to create a competitive advantage.

Operational systems such as ERP and CRM systems have universally been seen as “must haves,” but for companies seeking to thrive in an unforgiving economic climate, *business analytics* now falls into that “must have” category as well.


The SAS® Business Analytics Framework

The SAS Business Analytics Framework seamlessly integrates the fundamental elements of business intelligence, including:

- **Agile framework.** The SAS® Business Analytics Framework is an agile framework that grows over time to support performance objectives and changing market dynamics. Unlike monolithic platforms, such as ERP systems, SAS delivers results in months — not years. Organizations can start with the capabilities they need right now, and then add new functionality incrementally over time. As capabilities are added, the benefits continue to multiply while the total cost of ownership is reduced. Eventually — while solving more and more business problems, improving performance and evolving the business — an organization can grow the SAS Business Analytics Framework into a platform tailored to its needs.
- **Industry / line-of-business solutions.** Take advantage of packaged applications built on the platform for SAS® Business Analytics — tightly coupled with industry domain expertise, and data structures (models) tuned to the specific business and information technology processes used in each industry or line-of-business. Solve critical business issues and achieve objectives more quickly, with less risk, and at lower cost.

- **Unmatched analytics.** Support the entire analysis process — from data access to the point of decision — however varied or complex. Empower the business with a range of techniques to collect, classify, analyze, and interpret data to reveal new analytical insights. Provide an added level of specificity to the decision making process in order to address specific problems with greater precision and confidence. SAS offers an integrated suite of software for statistical data analysis, data and text mining, forecasting, econometrics, quality improvement, and optimization. Compared to just analyzing historic information (and using “gut instinct”), the ability to predict effectively gives companies a competitive advantage, lowers risk, and provides the insights needed to plan for the future.
- **Reporting in more places.** Make users more self-sufficient with simpler, role-based interfaces. Enable right-time decision-making through alerts and embedded analytics in reporting applications and business processes. Rationalize the myriad of query, reporting, and business intelligence tools and still meet the individual needs of each department. Deploy reporting across the enterprise without adding burden to the IT resources.
- **Collaborative data integration.** Always access and process the data you need. Improve data integrity at the source by embedding automated quality processes that consolidate, cleanse, and standardize your data directly in your operational environments. Offer a collaborative environment with common set of tools, promoting re-use and sharing to achieve faster results and lower costs. Deliver consistent, trusted, and verifiable information across systems.
- **Integrated capabilities with common metadata.** Data integration, analytics, and reporting are achieved through a robust environment that can be shared across departments, without the cost and complexity of cobbling together a multi-vendor solution. With SAS, information can be centrally managed and leveraged across the entire organization at a lower cost of ownership (less complexity, easier to manage and maintain). Departments and decision-makers access and share consistent and reliable information — improving organizational alignment and efficiency while driving better decisions.
- **Strategic performance management** for enterprise-level guidance, accountability, and integrity.
- **Professional services, training, and ongoing support** with extensive domain expertise to help your organization get rapid results and maximize the value of its SAS solutions.
- **Experience.** SAS has broad and deep experience helping customers improve their enterprise business analytics infrastructure. We help them combine technology, data models, methodologies, services, and partnerships so they can reduce the risk, complexity and burdens often associated with managing and effectively utilizing information. Based on over 30 years of experience solving complex problems in multiple industries, SAS offers proven methodologies and services to help organizations create an agile IT infrastructure that drives business transformation.

With the SAS Business Analytics Framework, you can address your most critical business issues right now and then add new functionality over time — all from one vendor, all through one framework, to help achieve financial excellence, operational excellence, and continuous performance improvement.



SAS has been helping customers get more value from their data for more than 30 years. As our customers realize returns from their investments in our software, many apply SAS solutions to new areas so they can gain the added value of an integrated platform for SAS Business Analytics, such as improved information consistency, faster information delivery, and reduced risk of errors occurring at handoffs between systems and applications. Our pragmatic approach to helping customers solve their pressing problems while keeping an eye on the future has helped SAS grow to be one of the largest software companies in world.

About SAS

SAS is the leader in business analytics software and services, and the largest independent vendor in the business intelligence market. Through innovative solutions delivered within an integrated framework, SAS helps customers at more than 45,000 sites improve performance and deliver value by making better decisions faster. SAS is used in countries worldwide, including 91 of the top 100 companies on the 2008 FORTUNE Global 500® list. Since 1976 SAS has been giving customers around the world THE POWER TO KNOW®.

For more information, visit www.sas.com

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