

Emerging Green Intelligence:

Business Analytics and Corporate Sustainability



Background and Methodology

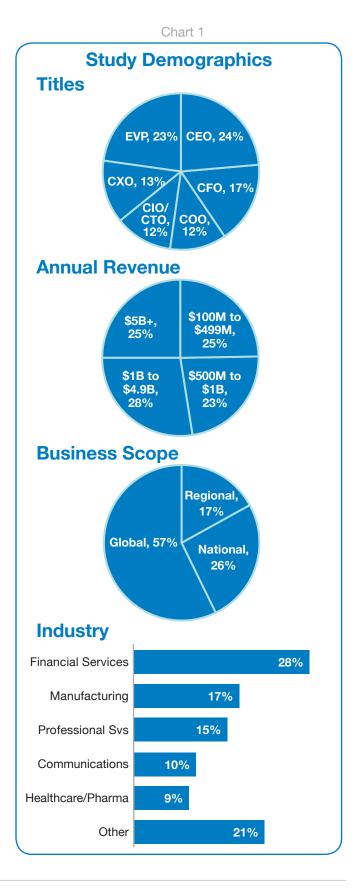
In April 2009, BusinessWeek Research Services (BWRS) launched a research program to determine the attitudes and opinions of C-level executives with regard to the use and value of business analytics. The research program was designed to understand how companies can optimize business analytics to improve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

This white paper, *Emerging Green Intelligence:* Business Analytics and Corporate Sustainability, 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. Overall, 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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Executive Summary

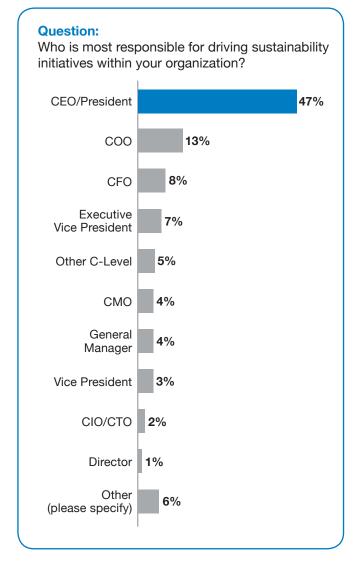
- Sustainability, an organization's ability to meet both its business needs and larger social and environmental needs, is not a top-tier concern at the moment but is still a focus of many C-level executives.
- Sustainability issues are driven by C-level executives, especially the CEO half of executives point to the CEO as the person most responsible for sustainability initiatives.
- Although still in its adolescence, sustainability is being recognized by innovative executives for the opportunity it offers; more than half of executives are focusing on sustainability throughout 2009.
- Additionally, in the last 12 months, half of organizations have increased their focus on sustainability, while two in five have kept their emphasis on sustainability the same.
- Business analytics has a positive influence on achieving sustainable business outcomes; almost half of C-level executives believe that it has an impact on sustainability, and most companies that have increased their focus on sustainability indicate business analytics has had a positive impact on business goals.

Introduction: Driving Sustainable Performance

Amid the current climate of greater demand for both environmental awareness and corporate accountability, organizations are finding that success is increasingly being measured not only by financial performance, but also by ecological and social accomplishments as well. In addition, the current economic climate has reinforced the need to plan for long-term success. The "Triple Bottom Line" of people, planet and profit is incentivizing companies to innovate in order to satisfy society and shareholders alike, and to realize the potential of previously untapped methods and markets. Research suggests that the most forward-thinking enterprises are using analytics to their advantage by applying it to sustainability.

Balancing economic interests against social and environmental concerns is referred to as "sustainability," a growing approach to business that has led stakeholders to put increased pressure on companies to equalize their goals. Yet the messages are mixed. Shareholders expect companies to generate profits, but they also want firms to make a positive contribution to society while negating environmental impact. Employees, regulators and yes, the customer, all want a company to do well, but they also want it to "do good." Innovative organizations that are winning in the space have found competitive advantages inherent in embracing sustainability. One thing is clear: When it comes to driving sustainability initiatives within organizations, C-level executives, especially CEOs, are at the wheel. Almost half of senior executives surveyed indicated that the person most responsible for directing sustainability initiatives within their organizations is the CEO (47%), with the COO following at a distant second (13%) (see Chart 2).

Chart 2



When asked how they would define the concept of sustainability, the answer of one C-level executive surveyed encapsulates the issue: "Keeping my organization successful for the long term in an environmentally responsible manner." But doing so requires integrating and analyzing data to achieve goals, and challenging the organizational culture to change. Information is vital to understanding key corporate sustainability issues and their social, environmental, and economic impact. From responding to public policies to engaging

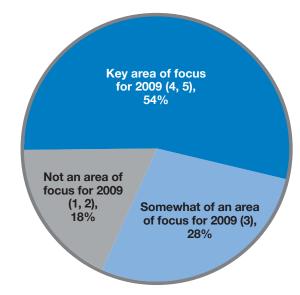
with the public and the international community, companies need to have fact-based information in order to develop robust sustainability programs that deliver bottom-line benefits to shareholders.

Sustainability is quickly becoming a mainstream metric. About half of organizations have increased their focus on sustainability and 54% of senior executives indicated that their organizations are focused on sustainability initiatives for 2009 (see Chart 3). Although sustainability is not the top focus during the current economic turmoil, executives have not abandoned it. If anything, its importance is growing, with many organizations currently working on new sustainability initiatives. And while sustainability may not be a top-tier initiative for 2009, many business programs associated with corporate sustainability remain hot-button issues for C-level executives, including performance

Chart 3

Question:

Please indicate how much focus your organization will place on sustainability initiatives in 2009. Use scale where: 1 = Not an area of focus for 2009; 5 = Key area of focus for 2009.



management, organizational effectiveness and risk management.

For Complex Problems, Analytics is the Answer

The management of sustainability performance requires a sound framework that first measures the environmental and social outcomes resulting from an organization's business, management and competitive strategies. It then needs to analyze the information in order to identify opportunities for improvement and evaluate alternative business scenarios. Lastly, it should consistently integrate environmental and social information for sustainability reporting.

The complexity inherent in reconciling traditional corporate objectives with the issue of sustainability means that leaders must have tools at their disposal to not only enact sustainable business practices, but also nurture and bolster them. Fact-based decision making enables an organization to measure, manage and report on the Triple Bottom Line and determine business strategies that reduce risk and increase shareholder value.

Almost half of C-level executives (48%) indicate that they believe business analytics can have an impact in the area of sustainability. With good reason: among those who have adopted business analytics methods, many have indicated that they have seen improvement in the areas associated with the larger sustainability issue, including optimizing financial planning and management (50% improvement), managing change (49%), sustainable business growth (47%), using analytics to answer high impact questions (46%), and risk management (43%).

While some might see the sustainability approach to business as another link in a chain of burdens

distanced from profit making, many are finding that what's needed to solve the world's challenges represents a tremendous business opportunity. Of the top 150 companies in the world, nearly all have a "sustainability officer." The benefits of an increased sustainability posture are significant, and include easier attraction of capital, greater employee productivity and retention of top talent, and increased brand equity. Companies from Wal-Mart to GE are finding that sustainability and profit are definitely not mutually exclusive.

Correctly calibrated sustainability strategies give corporations the ability to get ahead of the curve, balance the short term with the social term, and in turn be rewarded by their stakeholders. The most strategic enterprises will use data, and the intelligence gained from it, to their competitive advantage - driving increased brand value through innovation, improving internal efficiencies accountability. and and engendering the loyalty of consumers, employees and other stakeholders. The most innovative C-level executives - 66% of those surveyed, in fact - not only enact sustainable strategies, but also shape those strategies to increase the benefits to their business.

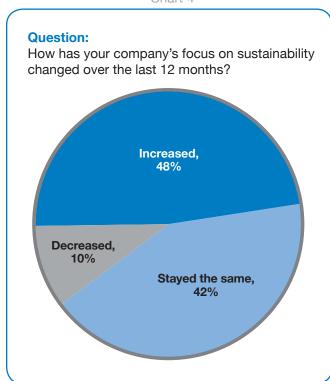
Thinking Globally, and Acting in the Boardroom

Think global, act local. For organizations across the business spectrum, sustainability is a powerful and defining idea. A sustainably run corporation is one whose business interests and the interests of the environment and society intersect, and which finds opportunity in taking action at that intersection. Many trend-spotters believe that the key performance indicator of the future is to measure the revenues associated with green products and services delivered to customers.

When asked to define sustainability, many of the C-level executives surveyed framed their answers in action-oriented ways, such as "the ability to thrive and maintain customer and partner relationships with minimal impact on the environment," or "the ability to prolong the organization's success, employees' well-being, stakeholder value and environmental wellness," and "the integration of social, corporate and personal concerns about ecology, commerce and environmental issues." Clearly for many executives, sustainability means taking action to meet the challenges of the low carbon economy head on.

Perhaps that's why over the last 12 months, many organizations have increased their focus on sustainability initiatives (see Chart 4). Fully 48% of executives surveyed indicated that their company has increased its focus on sustainability. Interestingly in this current economic environment,

Chart 4



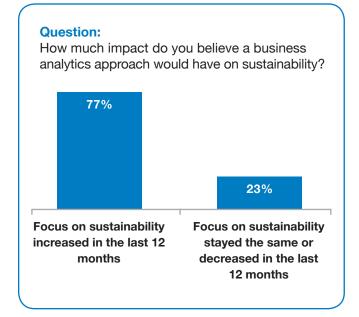
only about 10% say they have decreased their emphasis on sustainability, with the remaining two infive reporting that their emphasis on sustainability is still the same. The fact that the mainstreaming of sustainability continues, despite the difficulties of the current economic business atmosphere, is apparent in these numbers. It also highlights the fact that many sustainability initiatives, such as energy and water conservation, have a positive effect on the bottom line. The correlation between cost and carbon consciousness will keep these initiatives on the radar even when money is tight.

The benefit business analytics brings to organizations that increase their emphasis on sustainability would seem to be self-reinforcing. Organizations that increased their emphasis on sustainability are three times as likely to believe that business analytics can have a positive impact on their sustainability initiatives (see Chart 5). They may already be using business analytics to predict the return on investment of a proposed sustainability program, or evaluate their carbon footprint quarterly by geography or division. Additionally these findings could indicate a lack of understanding among the remaining firms as to the role business analytics plays in sustainability initiatives. These laggards, or "sustainability stragglers," may need additional information to properly assess the role of business analytics in moving sustainability initiatives forward.

Effective measurement and integration of sustainability is essential for compliance with policy and social pressure. As sustainability moves beyond its adolescence, innovative data tools that effectively forecast results and establish parameters and policy company-wide will be the most effective.

Observers note that the most strategic enterprises will use data, and the intelligence gained from it, to





their competitive advantage across the portfolio of business activities – driving increased brand value through innovation, improving internal efficiencies and accountability, and engendering loyalty of consumers, employees and other stakeholders. Sustainability is increasingly becoming one of those activities.

Understanding and embracing the advantages inherent in fact-based decision making is as important in the field of sustainability as anywhere else in business. Communicating those advantages to sustainability stragglers is an important part of thinking globally, and acting responsibly, in the boardroom.

Conclusion and Recommendations

Increasingly, businesses are expected to find ways to be part of the solution to the world's environmental and social problems. The best companies are finding ways to turn that responsibility into opportunity. Business analytics enables an organization to measure, manage, and report on sustainability performance indicators, calculate their carbon footprint, improve transparency and compliance, and evaluate alternative scenarios to identify actions that have the greatest impact on achieving your objectives.

As businesses are increasingly faced with responding to social, economic and environmental changes in the world around them, corporate leaders are leveraging their stewardship so as to transform their companies into fully-formed sustainable organizations. As the results show, those that have already initiated sustainable programs have found that business analytics is a critical part of delivering cost-effective results that all stakeholders can proudly embrace.

Sponsor perspective -

SAS® for Sustainability Management

Predict and respond to environmental, social, and economic risks and opportunities

Organizational performance now requires sustainability measures across social, environmental, and economic factors, which in turn requires the vital steps of integrating and analyzing data to achieve new goals and transform internal organizational cultures.

The most strategic enterprises will use data, and the intelligence gained from it, to their competitive advantage – driving increased brand value through innovation, improving internal efficiencies and accountability, and engendering loyalty of consumers, employees, and other stakeholders.

SAS for Sustainability Management enables an organization to measure, manage, and report on the Triple Bottom Line – environmental, social, and economic indicators – and determine business strategies that reduce risk and increase shareholder value. With SAS you can:

- Measure key sustainability activities using industry-accepted methodologies and protocols. You
 can trust the quality of data and resulting analysis from SAS' award-winning data integration
 and analytics capabilities, which leverage your existing investments in operational systems and
 databases.
- Report ongoing performance to ensure transparency with key stakeholders and compliance with regulatory agencies. By establishing an integrated, consistent source of quality information, you can bind initiatives to a common sustainability framework that allows alignment across all lines of business – from the data center to the water treatment facility.
- Improve performance by identifying the metrics that have the greatest impact on goal attainment so you can make the most informed strategic decisions. Apply the power of SAS optimization, forecasting and data mining capabilities to analyze scenarios and run simulations to improve response and successful strategy execution.
- Manage and forecast the finances and resources needed to achieve the desired outcomes across
 the enterprise and within each department. Prioritize organizational strategies and align investments
 in new product innovation, program development, and talent accordingly. Establish scorecards and
 strategy maps driven by the sustainability goals of the organization.

The SAS difference

As the leader in business intelligence and predictive analytics, SAS is the critical enabler that allows you to meet your environmental objectives:

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.

- Only SAS offers an integrated platform for business analytics that provides performance management initiatives with a consistent, accurate view of information, from data to decisions to support.
- SAS' pre-defined sustainability performance management framework is based on generally accepted sustainability reporting metrics, including the Global Reporting Initiative (GRI).
- SAS' analytic capabilities give insight into costs and cost drivers, as well as the financial impacts
 of green initiatives. Activity-based costing and capacity resource planning models help choose
 between alternatives, based on the predicted resources required.
- SAS delivers a variety of predictive analytics to help plan improvement strategies, avoid threats
 and measure results. SAS offers forecasting, simulation, and correlation analysis for superior
 environmental impact predictions.
- SAS is committed to sustainable development.
- SAS is an active and committed partner in the communities where we live, work, and conduct business. At SAS, we recognize that environmental sustainability is a continuous effort that requires prudent use and preservation of our natural resources. Please read our Corporate Social Responsibility report for more information.

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 118 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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10

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