Beyond Green: The Triple Play of Sustainability

The CIO is in a prime position to help organizations broaden sustainability efforts to cover environmental, economic and social impacts.
Executive Summary

Want to find the most environmentally conscious person in the organization to lead your company to a more sustainable future? A good place to start is the CIO. Across industries, CIOs in many companies have been spearheading corporate-wide “green” initiatives, both within and outside of IT, with many fruitful results. Through programs like data center consolidation, server virtualization, desktop power management initiatives, print management and new equipment procurement guidelines, to name just a few, CIOs have steadily worked to successfully reduce IT’s carbon footprint.

Many CIOs have also reached across the aisle to facilities management groups in their organizations to ensure that HVAC and lighting is optimized, inside and outside the data center. And by leading projects to baseline greenhouse gas and carbon emissions levels and then set reduction targets – even building dashboards for the entire company to easily view the results of their efforts – they have become advocates and educators for corporate-wide environmental sustainability initiatives.

However, the field of sustainability is much broader than just the environment. Organizations such as the Global Reporting Initiative (GRI) now define sustainability as a triumverate that encompasses not just the environmental impacts of the company but the economic and social footprint, as well (see Figure 1).

The Sustainability Triumverate

Source: Open-Sustainability
Figure 1
The classic definition of sustainability is “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” It is an expanded way of measuring organizational success, using values and criteria from the economic, environmental and social realms, often referred to as the “triple bottom line.” Increasingly, sustainability is also used as a term to describe a company's environmental, social and governance (ESG) management approach. The idea is to balance the needs of people, the planet and the company’s profits to create long-term shareholder value.

In ever increasing numbers, corporations, government agencies, universities and even cities are compelled to develop and report on key performance indicators around these three areas of sustainability. Annual reports that include just financial data may one day be superseded by “an integrated report,” as governments, investors, citizens, employees and business partners begin to demand a single document that integrates corporate performance on environmental, economic and social impacts and goals, as well. These “integrated reports” are not static documents but instead leverage the Web to provide stakeholders with analytic tools, more detailed information and an opportunity to engage with the company, according to Robert Eccles, professor of management practice at Harvard Business School and co-author of One Report: Integrated Reporting for a Sustainable Strategy. “It is as much about listening as it is talking,” Eccles says.

It won’t be long before sustainability reporting becomes a vital way of doing business. With a post-recession business world increasingly influenced by the four forces of the Future of Work – globalization, virtualization, cloud computing and millennial-influenced workforce and marketplace – pressure is mounting for companies to be transparent and open to scrutiny about how they do business and maintain profitability.

The CIO (and the IT organization) has an opportunity and perhaps even a responsibility to become a major contributor to
broader corporate sustainability efforts. IT already owns a large portion of responsibility for the environmental impact of computing resources, and with its cross-functional view of the organization, it often understands best how to optimize business processes and lead the organizational change necessary to begin the journey to sustainability awareness and reporting. Most importantly, since the effort requires a significant amount of information gathering, IT is perfectly positioned to support the business in choosing the foundation and tools for sustainability reporting and tracking.

In the near future, sustainability reporting will likely become a competitive differentiator, as investors, corporations and consumers increasingly use these measurements to decide with whom they do business. CIOs who get on top of this trend now can become an invaluable resource for building the strategies, frameworks, technology foundations and tools necessary for sustainability and, ultimately, integrated reporting. Companies that don’t start now will likely find themselves at a competitive disadvantage in the very near future. (Learn more by viewing our latest video.)
The Pressure is on for Sustainability Reporting

Concern about corporate sustainability is not new. Since 1999, the Dow Jones Sustainability Index has tracked the financial performance of leading sustainability-driven companies worldwide. What is different today is that sustainability is no longer just about the environment. As “green” efforts enter the mainstream, businesses worldwide are under increased scrutiny to become more socially responsible, as well as environmentally conscious, while meeting investor expectations for financial performance.

Also new is the mounting pressure on organizations to report on data showing their environmental, economic and social impacts, their progress toward these goals and areas in which they still have work to do. Increasingly, this type of reporting is expected to be integrated in one, single report that combines financial and non-financial performance information.

The pressure to report on sustainability comes from all sides: The financial community, customers, employees and government regulators. The idea of operating in a sustainable way and being able to report on it is becoming less of a feel-good practice and increasingly engrained in the way companies conduct business. Indeed, while sustainability reporting is currently voluntary, many believe mandatory reporting is inevitable.

Mandated or not, thousands of corporations around the world today engage in sustainability reporting, according to a study conducted by the CorporateRegister. This study found the number of sustainability and similar reports issued by corporations grew from 26 in 1992 to over 3,000 in 2008. According to the Hauser Center at Harvard, the world’s largest companies now regularly issue sustainability reports, in a wide range of industries, from financial services, to healthcare, as do nonprofit organizations, cities and trade associations. Ernst & Young research shows that more than two-thirds of the Fortune Global 500 publish some form of sustainability or corporate social responsibility (CSR) report.

Even if companies don’t formally issue a sustainability report, they are beginning to compile this data and make it available on their Web sites. In a 2010 report by PricewaterhouseCoopers (PwC), the number of U.S. companies with CSR information on their Web sites jumped from 75% in July 2009 to 81% the following year. Europe is further ahead, with 94% of companies publishing CSR data on their Web site and 18% publishing a CSR report.

U.S. companies lag behind their counterparts in other parts of the world. According to the PwC report, less than 30% of S&P 500 companies issued CSR reports in the U.S., compared with 75% of S&P Europe 350 companies. European companies are now seeing disqualifications to bid on RFPs because of poor ESG scores or no proof of improvement. And in South Africa, since June 1, 2010, all 450 companies listed on the Johannesburg Stock Exchange are required to publish an “integrated report,” including data on their economic, environmental and social impact or explain why they are not doing so.

Meanwhile, in the financial community, an increasing number of organizations are publishing rankings of companies based on their sustainability measurements, including the Dow Jones Sustainability Index, the CRD Analytics Global 1000 Sustainable Performance Leaders and FTSE4 Group’s FTSE4Good Index Series.

Since June 1, 2010, all 450 companies listed on the Johannesburg Stock Exchange are required to publish an “integrated report,” including data on their economic, environmental and social impact or explain why they are not doing so.
There is a growing investor awareness regarding the importance of sustainability and even the relationship between sustainability reporting and corporate performance. According to a 2010 study by Ioannis Ioannou at the London Business School and George Serafeim at Harvard, equity analysts are now giving higher ratings to companies with exemplary CSR practices. The study surveyed 4,100 publicly-traded companies over a 16-year period.

In addition to investors, customers are applying pressure for greater transparency and improved performance on sustainability. Cognizant receives approximately one request per week from our customers on ESG performance. Clearly, all global companies will need to raise the bar of their sustainability reporting to meet the needs of clients, worldwide.

Benefits of Sustainability Reporting

In addition to the external pressures to institute a sustainability reporting program, there are also significant benefits to creating better internal processes and controls to gather and analyze ESG data. According to Ernst & Young, these include better measurement of the organization’s triple-pronged bottom line, greater stakeholder trust, improved risk management and increased operational efficiency.

Sustainability reporting is very much aligned with the Future of Work forces and channels these forces in useful and productive ways. For example:

- **Changing demographics:** Companies that become more transparent and showcase their corporate social responsibility will be more attractive to the growing numbers of millennials who will soon dominate both the workforce as employees and the marketplace as consumers. It won’t be long before not reporting on sustainability becomes a risk factor, as those that don’t will soon be seen by consumers, employees and other stakeholders as unwilling to be transparent and even less competitive.

- **Globalization:** With more businesses expanding into emerging economies and assembling work teams across geographies, including developing nations, there are increasing drivers around sustainability, such as social justice, labor practices and human rights. Sustainability reporting will also enable globally-minded companies to more effectively comply with legislative mandates across the world.

- **Virtualization:** Tackling sustainability is not an effort that should be contained within the four walls of an organization, but rather, it extends beyond traditional organizational structures. People from both inside and outside the organization should join together as a virtual team to tackle sustainability issues and reporting.

- **Cloud:** Social networking and other Web 2.0 technologies play a two-pronged role in sustainability reporting. They are both driving demand for greater transparency and enabling companies to report in more engaging and interactive ways. For instance, corporate Web sites can expand beyond static sustainability reports by including interactive features such as blogs and feedback mechanisms.
According to Professor Eccles, sustainability reporting leverages the Internet to provide more detailed information of interest to shareholders and other stakeholders, as well as for improving dialogue and engagement with all stakeholders.

Additionally, companies will need to build out their infrastructures and create a new IT foundation to enable sustainability reporting. In many cases, it makes sense for some of these tools and technologies to be delivered more cost-effectively through the cloud, through business process as a service (BPaaS).

**Sustainability Reporting Trends**

Two important trends that are influencing sustainability reporting programs are the Global Reporting Initiative (GRI) and the integrated report.

**Global Reporting Initiative**

The GRI is a main point of reference for corporate sustainability reporting. This voluntary, non-proprietary initiative has developed content and quality principles, standard disclosures and a set of 79 universally applicable reporting parameters to guide organizations in developing programs to measure corporate performance on sustainability (see Figure 2).

---

**GRI Performance Indicators**

Source: Global Reporting Initiative

---

*Numbers show core vs. total indicators. Of the 79 total indicators, 49 are “core” and 30 are “additional.”*
Just as there are standard ways to calculate revenues and assets, for example, these GRI indicators provide guidelines for what to disclose and how to report on non-accounting-based economic indicators and environmental and social performance. The GRI’s G3 Guidelines are grouped into the three commonly accepted categories that define sustainability:

- **Economic**: These indicators include the company’s impact on the economic conditions of its stakeholders at the local, national and global levels.

- **Environmental**: This includes the impact on living and non-living natural systems, including ecosystems, land, air and water.

- **Social**: This includes the impact on the social systems within which the organization operates. Four categories are included:
  - **Labor practices**: Impacts on the workforce, including labor/management relations, health and safety, training and education and diversity.
  - **Human rights**: Includes investment and procurement practices, child and forced labor, security practices.
  - **Society**: Impacts on communities, including corruption, public policy and anti-competitive behavior.
  - **Product responsibility**: Includes product health and safety, information and labeling, marketing and privacy.

Companies can move through three levels of GRI compliance, as they grow more advanced in their sustainability reporting. For Level C reporting, a company must report on only 10 of the parameters, while for a Level B report, it must report on at least 20. For Level A reporting, a company must report on all core and Sector Supplement indicators or explain the reason for its omission.

The GRI is fast becoming a commonly used framework for sustainability programs, with over 1,200 reports registered in 2009. According to PwC’s 2010 study, 83% of companies that produce sustainability reports use the GRI guidelines. According to KPMG, 80% of Fortune Global 250 companies and 70% of the world’s largest 100 companies refer to GRI guidelines. The GRI has caused a multiplicative effect, since once a major company adopts GRI reporting, it often asks suppliers to report on similar indicators. The G3 Guidelines are used by CRD Analytics in its Global 1000 index, and they will likely become incorporated into frameworks that get developed for integrated reporting.

In addition to its role in developing standard reporting parameters, the GRI is influential in other ways. It believes that by 2015, all large and medium-size companies in Organization for Economic Cooperation and Development (OECD) countries and large emerging economies should be required to report on their ESG performance and, if they do not do so, to explain why. It also believes that by 2020, there should be a generally accepted and applied international standard that would effectively integrate financial and ESG reporting by all organizations.

**Integrated Reporting**

Integrated reporting combines financial and sustainability measures into a single, dynamic report that leverages Web 2.0 technologies to engage with stakeholders in dialogue and analysis. A major driver for integrated reporting is the work of Professor Eccles of Harvard Business School, who advocates for GRI parameters to be adopted as the worldwide sustainability reporting standard. Eccles describes...
the central role of integrated reporting in creating sustainable companies and, ultimately, a sustainable society, in his book, One Report: Integrated Reporting for a Sustainable Strategy. In effect, Eccles believes that corporations play a crucial role in creating a sustainable world. All companies need to be profitable to stay in business, he argues, but the question is, how are those profits earned, and what are the social and environmental costs of earning them? While sustainable organizations need to be bolstered by a new ecosystem of management practices, technologies, intelligent regulation and individual decisions, integrated reporting is central, Eccles says, because it establishes the discipline for the integrated management of financial, natural and human resources. It also meets stakeholders’ information needs – along with processes of engagement – to enable them to help the company build a sustainable strategy.2

The topic of integrating financial and sustainability reporting is gaining significant interest in various groups, such as compliance and financial reporting experts, academicians and socially responsible investors. Major companies are moving to an integrated report, such as Southwest Airlines, United Technologies and Novo Nordisk. Some European countries, such as France, are edging closer to requiring companies to produce an integrated report.

The Role of the CIO in Enabling Sustainability

IT is uniquely positioned to work on corporate sustainability initiatives and could even position itself as sustainability champion in companies without a chief sustainability officer. Not only does IT already own a healthy piece of responsibility for the company’s environmental impact, but it also has a cross-functional view of the organization and understands how to optimize business processes and lead organizational change management necessary for launching a sustainability program. Key IT roles such as enterprise architect, business architect, IT relationship manager and business analyst have the process skills and organizational knowledge to drive waste and inefficiency out of the organization.

Most important, sustainability programs require new frameworks, strategies, technology foundations and reporting and tracking tools, in which IT must be integrally involved in selecting. IT has a vital role in supporting organizational efforts to gather information about sustainability from internal and external sources, create collaborative capabilities, set targets and track progress against these goals.

IT’s role in a corporate sustainability program falls into two categories of activity: Plan the platform and tools for the initiative and analyze and improve the company’s sustainability performance.

Category 1: Develop the integrated technology foundation that collects, analyzes and reports on core sustainability information for GRI reporting.

IT can lead the effort to identify a subset of GRI indicators the company is going to track. In some cases data exists, and it’s a matter of pulling it together in a reporting format. But other data may not exist, such as the case of occupational/health and safety data or carbon reporting.

Because sustainability reporting is not a one-time event but at least an annual endeavor, applications need to be developed that automate data collection and capture of these indicators. Not all GRI indicators require an IT system, but 50% to 70% could be facilitated through technology.
Once captured, the data needs to be rolled up into a centralized platform, and analysis and reporting tools need to be disseminated for key stakeholders to set targets, track efforts and report to various audiences. For instance, the core HR system can provide data on employee demographics, but companies also need to set targets for improvement and perform year-over-year tracking, as well as real-time monitoring for new hires and attrition.

Such real-time monitoring, reporting and analysis will require sophisticated sensing and database technologies, according to Professor Eccles, who recently moderated a workshop on integrated reporting at Harvard Business School. Technology will also enable reporting to become an interactive dialogue among virtualized teams of participants through the Web.

The key technology elements outlined in the workshop include the following:

- **Sensing technology**: Sensors that gather information about heat, light, electricity and fuel consumption, as well as water flow rates, can help capture relevant data in real time. Such technology can be used to monitor the status of different metrics in facilities or manufacturing processes.

- **Data tagging**: By tagging data that is captured, it can be made available in real time. Users can drill down or manipulate the data via easily usable iPhone-like applications. Extensible Business Reporting Language (XBRL) can play a key role in this. XBRL is a standards-based way to communicate and exchange business information between business systems. It is becoming an important technology for publishing both financial and sustainability data, particularly as more ratings and rankings organizations demand automated methods to capture sustainability performance data from companies.
• **Real-time monitoring, reporting, analysis:** This will help organizations react quickly when problems are identified or sustainability performance indicators trend in the wrong direction.

• **System and application integration:** This is necessary for companies to aggregate ESG data across regions and systems.

• **Security/privacy:** More data will be made publicly available, but sensitive data will still need protection.

• **Web 2.0:** Unlike traditional reports, integrated reports are ideally interactive, enabling participation in wikis, blogs and other feedback mechanisms.

• **Cloud computing:** Capabilities needed for sustainability programs can be delivered via BPaaS solutions. The use of cloud can also reduce the need to invest in developing new systems.

IT needs to plan and either build or buy the entire technology stack that brings together these capabilities (see Figure 3).

**Category 2: Analyze and improve the company’s sustainability performance.**

IT can also play a lead role in improving corporate sustainability performance to ensure the long-term economic success of the enterprise. The commitment to doing this needs to start at the highest level of the organization, with sustainability becoming integrated into the corporate strategy, which is supported by the overall IT strategy.

As a starting point, corporations must understand the idiosyncrasies of their business and industry in which they compete and identify the types of sustainability pressures and opportunities the business is facing. For instance, pressures for a consumer products company or a manufacturer will be much different from those of a B2B software company or a company in a knowledge-based industry. The products and services that companies offer may provide great opportunities for either positive or negative social impact. Such insights can be gleaned either by working with the corporate sustainability officer (CSO) if you have one, or simply by reading the sustainability reports of your competition or similar companies.

Two useful tools for analyzing and improving sustainability are the “value chain” and “diamond framework” from Michael Porter, Harvard Professor and leading authority on business strategy. The value chain takes an “inside-out” view which involves charting all the activities a company engages in, identifying the social impacts of those activities, developing a list of problems and opportunities to address and identifying opportunities for social and strategic distinction. The diamond framework is used to analyze the competitive context a company is in. It looks at “outside-in” linkages – the external influences at the company’s locations (such as transportation infrastructure) that impact its ability to compete. In this case, the company would select a few social initiatives to pursue that have high shared value. In both cases, you can use the GRI’s 79 parameters to help build the inventory of issues and opportunities.

As a starting point, corporations must understand the idiosyncrasies of their business and industry in which they compete and identify the types of sustainability pressures and opportunities the business is facing.

The business analysts on your IT staff can provide useful insights in this type of analysis, as they are likely accustomed to using these types of tools. In fact, the CSO might want to do this type of analysis but not have the skills to do it themselves and need your team’s assistance.
Examples of sustainability opportunities to which IT can contribute include:

- Compliance-oriented systems, which drive better corporate governance, improve business ethics and reduce the risk of violations or corruption.

- Employee and customer satisfaction tracking systems.

- Sites to engage stakeholders using Web 2.0 and social media. One example is Starbucks’ BetaCup online contest to create a reusable or recyclable coffee cup by 2015. The company is using the Web and mass collaboration principles to gather submissions, generate discussion, provide expert feedback and refine ideas on sustainable design. Cash prizes will be rewarded to people who submit the best ideas.

- Applications that improve product or service safety, or reduce the environmental or health impact of a product or service, or improve customer knowledge of a product.

- Applications or Web sites that provide social benefit outside the company, such as Verizon’s Thinkfinity.org Web site that provides thousands of resources to teachers and students, globally. Another example is the Pepsi Refresh project. The company encourages people to submit specific ideas for making a positive impact on the world; promote their submission through videos, social media and other means; and then vote on submissions, including their own. Winners are granted money from Pepsi to fund their project.

- Mobile technologies, such as m-health applications that allow patients to monitor treatment progress using their mobile phones.

- Enabling ways to serve new customers at the base of the pyramid.

**Call to Action: Beyond a Mandate**

Companies today are called upon to operate responsibly. What are you doing to improve economic conditions in the markets in which you operate? Are you treating your employees fairly? Are your products and services produced and used in ways that meet customers’ increasing expectations about sustainability? How are you improving the quality of life in the communities in which you operate? What are you doing to reduce your company’s impact on the environment? What are you doing to ensure continued availability of scarce natural resources? Particularly with millennials entering the workforce and adding their voices to public opinion, transparency and social responsibility are becoming more important than ever. Organizations will increasingly be called upon to move beyond rhetorical commitments to sustainability and into a mindset of managing and even competing on their performance against the most meaningful of sustainability indicators.

To build a more sustainable planet, reporting across environmental, economic and societal factors needs to be tightly integrated and standardized. To this end, GRI and “one” reporting are poised to become internationally accepted standards. In addition, companies will need partners with demonstrated expertise in building, managing and maintaining such systems. Since the processes for creating an integrated report will increasingly be refined and standardized, it makes more sense to tap an existing hosted process rather than building a one-off system. Investing in the right IT today can pave the way for a more sustainable – and competitive – future. The key is to think about areas where your company, using IT,
might be able to either do less harm or, ideally, do more good. And by doing more good, it will also be able to increase revenue, reduce cost, optimize the supply chain, improve the organization's reputation and reduce business risk.

In the end, sustainability represents a significant opportunity for the CIO. Particularly in organizations where a program has yet to begin, CIOs should consider stepping up and offering to take on this role until the time the company has sustainability embedded in all of its core business processes and no longer needs to be flagged as a separate initiative. Those CIOs who step up to this challenge will enable their companies to develop more sustainable strategies. Corporations can play a leading role in creating a more sustainable society, and CIOs have it in their power to ensure they can do so.

References


“Seven Questions CEOs and Boards Should Ask About ‘Triple Bottom Line’ Reporting,” Ernst & Young, http://www.ey.com/Publication/vwLUAssets/Seven_things_CEOs_boards_should_ask_about_climate_reporting/$FILE/Seven_things_CEOs_boards_should_ask_about_climate_reporting.pdf


About the Author
Mark Greenlaw is Cognizant’s Vice President of Sustainability and Educational Affairs. In this role, he is responsible for ensuring that Cognizant conducts its business in a sustainable and socially responsible manner. Mark also oversees Cognizant’s U.S. Education Outreach and Campus Recruiting Programs. Previously, he was Cognizant’s CIO with responsibility for Cognizant’s global IT function as the company grew from 17,000 to over 80,000 employees. Mark has 26 years of experience in the information technology industry and a graduate of Penn State University. He can be reached at Mark.Greenlaw@cognizant.com.