



# GREEN intelligence

**A** sea change is occurring inside the business community as corporations come to understand that working within a sustainable environment and going green can improve profits. For most businesses, the motivation is the bottom line. Companies are finding that reputation has a major impact on stock prices, and going green can project a positive corporate image with investors, suppliers and, most important, customers. But corporate responsibility and citizenship are also dynamic factors that entice organizations to take the green path.

Going green addresses our planet's governance and sustainability. It includes improving population health, minimizing waste, lowering emissions, reducing dependence on fossil fuel and providing stewardship of our forests, fisheries and water supplies.

Additionally, in many countries, concern over governmental regulation propels organizations to stay ahead of the curve before they are forced to take specific actions. Companies need to be armed with data supporting their green initiative to show they are not polluting, are using scarce

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*by Sid Adelman*

resources effectively and are helping protect the environment overall.

Business intelligence (BI) and the data warehouse provide organizations with meaningful, clean and well-understood data that can be analyzed to support green applications and sustainability.

## Green IT

Organizations that embark on green programs must analyze their emissions, waste, safety, resource use and other factors related to sustainability. By leveraging a data warehouse, these green-conscious companies can measure, analyze and demonstrate improvements. Furthermore, with the data at hand, companies can predict the effectiveness of their green initiatives and establish ongoing programs and procedures for maintaining their environmental goals.

IT can improve sustainability and contribute to a greener planet in the following ways:

### REPORT REDUCTION

Organizations are commonly overloaded with hard-copy reports. On a basic level, BI could provide an organization with the ability to minimize hard-copy report creation. Many companies have drastically reduced such reporting by providing the same and even better information electronically using a data warehouse. Reducing paper reports saves trees, minimizes the chemicals, energy and fuel required to manufacture and deliver the paper, and decreases waste paper.

### ASSET MANAGEMENT

By analyzing asset data such as trucks and machines, an organization can reduce the amount of unnecessary equipment and other assets it purchases/owns. Less purchased equipment means fewer resources necessary to produce and operate this equipment.

### INVENTORY MANAGEMENT

An organization using a data warehouse system can accurately analyze its inventory, including products or supplies on order. With this information, the organization can adjust its work orders so it has less merchandise or manufacturing inventory to store and, consequently, less old inventory to be discarded. Furthermore, less inventory on

hand can contribute to lower overhead and less transportation cost and decrease needs for transportation resources. Finally, with a better inventory management system and a smartly stocked warehouse, the company can experience greater cost savings.

### DEMAND FORECASTING AND PRODUCT PLANNING

BI is a prime tool for demand forecasting and product planning. Better demand forecasting and improved product planning because of better demand analysis can result in fewer products produced, fewer initial resources to manufacture the products, less packaging and reduced transportation cost.

### MANUFACTURING

Analyzing different means of packaging and shipping manufactured goods can result in less packing material, which translates into less waste to dispose of at the back end. Smaller packaging also means less fuel used in transportation.

### REPORTING ON SUSTAINABILITY

By capturing an organization's metrics on sustainability—including the use of resources such as water, electricity and natural gas—and services for transportation and waste disposal, an organization has the information to take actions that can save money and improve sustainability. The data warehouse and BI are eminently useful in supporting this type of reporting. Also, enterprise resource planning systems provide information on an organization's activities and can help capture these metrics and provide them to the data warehouse for analysis.

### GREEN OPPORTUNITIES WITHIN IT

An IT operation consumes large quantities of electricity to run and cool the servers and equipment and maintain the IT facility. Many organizations are working to remove redundant data, minimize and consolidate the number of redundant databases, sunset

or turn off applications, and eliminate outdated and unused systems and servers. This is not a trivial effort.

Often, redundancy is a result of politics—improvements in IT operations happen only with a directive from the CEO or the COO to evaluate all new systems for their impact on redundancy. The CIO should be part of this process, and management often needs convincing before it will embark on such a program. Sunsetting systems occurs when defined projects and initiatives target the consolidation process. Data mart consolidation fits nicely into this category of savings. Senior management must be exposed to the very real dollar savings from reduced redundancy and improvements in IT operations.

### SERVER EFFICIENCY

Most hardware manufacturers are aware of the energy cost of running their servers and are working to reduce electrical demands as well as the heat generated. The heat generated requires energy-costly cooling systems that approximate the energy required to run the hardware. Any company that announces new hardware should highlight the efficiency of the system.

## Win, win, win

Nearly all of these initiatives contribute directly to an organization's bottom line. Even areas that do not make a direct and tangible contribution have an impact on the organization's reputation and employee morale—it's great to work for a morally conscious organization. For the sake of sustaining a healthy environment, every organization should embark on one or more of these green programs. The company wins, the planet wins and humanity wins. **T**

*Sid Adelman is a principal in Sid Adelman & Associates, which specializes in planning and implementing data warehouses. He also consults on organizational and cultural issues.*