THE WALL STREET JOURNAL.

Business Insight (A Special Report): Sustainability --- How Green Should My Tech Be? To decide whether an eco-friendly IT idea makes sense, first place it in one of four categories

Robert Plant. **Wall Street Journal**. (Eastern edition). New York, N.Y.: Jan 25, 2010. pg. R.6

Abstract

To find out, we looked at green initiatives in one critical section of businesses, the corporate data center, and placed potential projects into four categories. Many deep-pocketed corporations have launched splashy environmental initiatives -- such as using the power of waves to run their data centers -- that grab lots of attention and potentially win new customers.

In these tough economic times, green initiatives can be a hard sell. Companies don't want to take a gamble on pricey projects that lie outside their core mission. Yet lots of eco-friendly ideas promise to pay for themselves -- and then some -- by slashing costs and boosting efficiency.

How should companies approach the problem? To find out, we looked at green initiatives in one critical section of businesses, the corporate data center, and placed potential projects into four categories. At one end of the spectrum are obviously useful ideas that are simple and inexpensive. At the other end are expensive distractions that should be avoided at all costs. By figuring out which category an idea fits into, companies can better weigh the risk and potential return.

One caveat. This system -- based on an earlier model developed in collaboration with Prof. Leslie Willcocks from the London School of Economics -- relies heavily on the judgment of a company's chief information officer. We assume the CIO is closely monitoring promising technologies and can evaluate their possible impact on the business.

Here are the four categories.

-- No-Brainers. In these cases, the green technology is a commodity. It not only cuts power use and emissions -- thereby fulfilling its green mission -- it's easy and cheap to obtain and implement. The bottom line: Companies should pursue these projects as soon as possible.

Examples: virtualization, which lets one computer do the job of many; advanced cooling techniques that save power in data centers; and software that identifies when a machine is inactive and powers it down efficiently and securely.

-- Promising but Pricey. Here, the green technology is clearly useful but isn't yet popular enough to be a commodity. So, CIOs face a gamble. If they adopt the technology before it becomes the Next Big Thing, they might cut their costs and boost their efficiency before everyone else does -- which could give them a big edge on rivals. But they'll pay more upfront than if they waited, and there's always the risk that the technology proves to be a flop in the long run. And that could leave them stuck with systems that aren't supported by vendors and may need to be replaced eventually.

Consider one new cutting-edge technology: data-center management and planning software. These systems greatly streamline an important job, tracking and managing the power that servers use, but relatively few companies have adopted them yet. So, managers that plunge into the technology may be able to quickly

reduce operating costs before rivals can. But large vendors are signaling that they'll jump into the field in the near future -- which may lead to much lower prices.

-- Business Opportunities. In some cases, green tech initiatives have the potential to win new business. One company in Asia, for instance, faced the prospect of building a new corporate headquarters in an area vulnerable to earthquakes and typhoons. The CIO argued that the company should create a structure that would withstand tremendously powerful earthquakes -- and put its data center there. Not only was the information secure, the company could rent out space in the center to other businesses that were eager to protect their data.

How to decide if an initiative will pay for itself in new orders? Obviously, there's no easy answer; it depends on the company and the plan. Executives need to be constantly looking at new technologies, regulatory issues, economic forecasts and marketing analyses to make the best judgment. And they should realize that it may take some time to see results -- customers may be slow to recognize your efforts and change their behavior accordingly.

-- Distractions. When evaluating green projects, the vast majority of companies shouldn't try to keep up with industry titans. Many deep-pocketed corporations have launched splashy environmental initiatives -- such as using the power of waves to run their data centers -- that grab lots of attention and potentially win new customers. But most small and midsize companies can't afford to take a chance on these kinds of ambitious projects. Instead, they should focus on more modest and practical solutions that bring an immediate payoff, such as using flywheel technologies instead of batteries for backup power.

Dr. Plant is an associate professor in the department of computer information systems at the University of Miami's School of Business Administration. He can be reached at reports@wsj.com.
