

September 2007:

- » Practical Steps to IT Efficiency
- » Ethics Drives Excellence
- » World's Fastest Microprocessor
- » McNealy & U.N. on Digital Divide

UPDATE YOUR PROFILE

Want to get information tailored to your needs? Update your profile now.

YOUR NEWS

Jonathan at Web 2.0 Summit

Hear from CEO Jonathan Schwartz on Sun innovation at the Web 2.0 Summit in San Francisco, October 17-19.

World's Fastest Microprocessor

Explore how breakthrough technologies in Sun's new UltraSPARC T2 processor give your datacenter room to grow.

Eco Conscious Employers

A poll reveals 73 percent of U.S. workers want employers to be environmentally responsible — but lag in their own efforts.

Eliminating the Digital Divide

Scott McNealy talks with the U.N.'s Dr. Djibril Diallo about eliminating the Digital Divide.

IDC on Niagara

The analyst firm explores the rise in adoption of CoolThreads technology since its introduction in December 2005.

THE CEO PERSPECTIVE

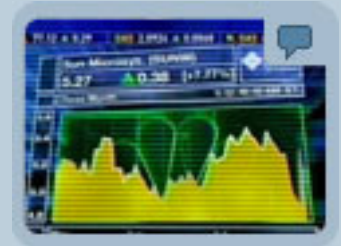
Schwartz Talks Financials on CNBC

CEO and President Jonathan Schwartz appears on CNBC's Squawk on the Street to discuss Q4 and FY07 earnings results and the company's focus on innovation and growth.



[Read Jonathan's Blog »](#)
Get the latest from Sun's CEO

[View Video »](#)



LEADING VISION

Align and Conquer: Practical Steps to IT Efficiency

How much is your organization wasting in IT resources, space, and energy inefficiency? Your answer could indicate an organizational alignment quandary.

[MORE »](#)

Sun Eco Innovation Initiative »

New Sun programs can help your organization improve datacenter efficiency while reducing environmental impacts.



EXPERT INSIGHT

Ethics Drives Business Excellence

Does a strong sense of business ethics pay off with competitive advantage and greater profitability? To find out, we sat down with ethics expert Dr. Adam Galinsky of Northwestern University.

[MORE »](#)



INDUSTRY FOCUS

NYU Builds Digital Library on Sun Fire X4500 Servers

Tackling an ambitious project to archive millions of digital assets, New York University turned to Sun Fire X4500 servers to supply more than 400 TB of raw storage in a simple, elegant, and scalable infrastructure.

[MORE »](#)

Align and Conquer: Practical Steps to IT Efficiency



Aligning the strategy, culture, and business processes of an organization is requisite in today's business environment to build sustainable, ecologically and economically responsible datacenters and workspaces. Alignment goes hand-in-hand with inventorying and consolidating physical and IT assets, which if properly executed, can result in millions of dollars in savings for many organizations.

Sun faced this alignment challenge head-on when inventorying its own IT portfolio and working to improve datacenter efficiency and utilization and reduce environmental impact. The results of this

process were unveiled at Sun's Eco Innovation launch in August.

Sun Chief Human Resources Officer and Executive Vice President, People and Places Bill MacGowan shares learning and insights gained with Sun *Executive Boardroom* readers.

Q: What business problems are companies facing that make organizational alignment so critical?

A: Many companies experienced unprecedented growth during the tech boom growth in real estate, lab space, IT, and datacenters. Many built disparate organizational units with duplication of efforts, leading to inefficiencies. Companies today are increasingly under pressure to do things more efficiently.

Other factors such as the cost of real estate, the rising cost of power, new equipment and opportunities, labor availability, even weather, have exacerbated this issue. Many companies don't have unified control or visibility into their technical infrastructure portfolio. As a result, they have large, expensive datacenters and labs that are anything but eco-friendly, as higher energy demands have put increased pressure on power and cooling requirements.

The way organizations have typically monitored and been rewarded is via split responsibility. You have the CIO or datacenter owner focused on performance, you have the facilities organization focused on utility cost and saving space, and you have the CFO looking at overall cost and trying to drive opportunities by making groups talk to each other. It's the cultural barriers of these split responsibilities that have been the biggest barrier to driving change. Decisions are often made in a vacuum with short-term gains but long-term impact to the business.

It's the cultural barriers of these split responsibilities that have been the biggest barrier to driving change.

So you have disparate groups making decisions in silos, and yet the overall company has to determine the impact of IT on the bottom line. The only way to do that is to understand all those costs together. If you don't have alignment, you're not going to be able to manage any of this.

Q: Is this a new problem? How prolific is it?

A: The technical infrastructure problem has existed for many years, but has become much more visible with the cost of implementing high-density datacenters. As energy efficiency and the environmental impact of IT become real customer concerns, there is an even stronger need to align the CIO, CTO, and facilities budgets so that design choices for IT infrastructure account for long-term facilities cost efficiencies.

Energy consumption has changed. For many datacenters, energy consumption is going to overtake the cost of hardware by 2010, according to the analyst group IDC. In many organizations, it isn't the lab owner or CIO paying the utility bill — it's the facilities organization. Outsourcing of facilities management makes this even more complex.

Many companies have too many rooms with too much duplication of effort. When Sun started to inventory its portfolio, we had 1,588 individual rooms with 1.3 million square feet of datacenter and lab space worldwide. About 8 percent of that was IT and 92 percent was engineering space. We knew this was inefficient, so to address it we formed an internal group to profile and manage the technical infrastructure portfolio and bridge the gaps between IT, engineering, labs, and facilities.

The goal was to have a neutral body that would offer an independent, objective view and drive progress. In one lab consolidation example, we ended up consolidating 202,000 square feet of lab and datacenter space into 76,000 square feet in 12 months. When you think of how expensive each square foot of lab space is, especially in areas such as Silicon Valley or Manhattan, this is considerable savings.

In this same lab, we also replaced hardware with [new equipment](#) that drove an 88 percent square footage compression and drove utility costs down by 61 percent. By reducing the amount of new lab space we needed on the Santa Clara campus, we were able to avoid retrofitting our existing office spaces to accommodate a datacenter, resulting in a savings of over \$9 million dollars in construction costs. Our local utility offered incentives for doing this. We received close to a million dollars in rebates and awards because of our [datacenter designs](#) and use of energy-efficient equipment.

As Sun found, placing a single group in charge of driving these discussions can solve problems and make you more nimble. The CFO is happy because you save money, engineers and IT are happy because they receive newer equipment in more efficient rooms, and facilities is happy because space is compressed. It's a triple win.

Q: So how does a company get its arms around its technical infrastructure portfolio?

A: I believe that companies need to get around that cultural issue first by creating an independent, centralized group that has the authority and corporate level financing to create and execute a datacenter and lab space strategy. If you leave it to the aforementioned groups to do it, you won't make the progress you want.

Companies need to create an independent, centralized group that has the authority and corporate-level financing to create and execute a datacenter and lab space strategy.

Give your independent group time to audit your portfolio and start creating models and strategies to evaluate options. It took Sun about one year to profile its 1.3 million-square-foot portfolio. Once the analysis was complete, we took 12 months to build our new datacenters. The economic and environmental savings have been considerable. How long the process takes other companies will be a function of the portfolio size.

Q: What cultural challenges might companies face and what shifts are required to get buy-in from everyone?

A: It gets down to fundamental concerns of management. Some groups will fear loss of control and ownership. Users aren't going to want to give up their datacenter space. There is a general fear of change with stakeholders who are afraid they won't get what they want out of the new model. Educating stakeholders on the opportunity and drawing them into the process is key. Our engineers were worried about the changes until they saw the new infrastructure and started experiencing the benefits. Then they got on board.

Support from senior management is also critical. They need to understand the vision and agree that there is a problem. A forcing function can help kick start the process — for us, it was the closing of a large campus. This allowed us to balance all of the key stakeholders by providing new datacenters and equipment to engineers, and offered an inducement for facilities, real estate, and financing because they could compress and save money.

The organization you put together to handle all of this needs to have experts who not only understand IT and facilities issues but also the challenges of financing and corporate timelines and goals. If you're unrealistic, you'll lose credibility.

Q: How does this organizational alignment make the enterprise more productive, competitive, or profitable?

A: It helps to achieve financial goals in operating margin by shedding hundreds of millions of dollars from your run rate. Having standards on scalability, flexibility, and repeatability saves money. The key is to be agile, with flexible environments and mobile equipment that is easily reconfigured. Reorganizations, acquisitions, and consolidations happen all the time in companies. In the old environment, this required physical changes. This newer environment makes it much easier to accommodate ongoing changes.

Product engineers will likely tell you that they can build better products because they have more efficient laboratories with better equipment. Internal customers feel they are better off because they have datacenter environments that can scale with their needs. These stakeholders can then evangelize your model, which is really the ultimate measure of whether your cultural objectives are achieved or not.

About Bill MacGowan

As chief human resources officer and executive vice president of People and Places, Bill MacGowan is focused on Sun's biggest asset, our workforce. MacGowan's People and Places organization is responsible for developing reward strategies that attract the best and brightest people, creating innovative learning and development opportunities for employees, providing flexible work arrangement through Sun's iWork program that allows us to draw on a broad, diverse talent pool, managing Sun's global facilities portfolio, and identifying strategic locations targeted for workforce growth.

Ethics Drives Business Excellence



Does a moral compass help an enterprise become more competitive? To find out, Sun caught up with Dr. Adam Galinsky, Kaplan Professor of Ethics and Decision in Management at Northwestern University's Kellogg School of Management.

Q: What are the key components of business ethics?

Galinsky: When we talk about business ethics, usually we're speaking about standards of behavior in the workplace as well as with customers and partners. Companies known for high ethical standards usually have an ethical code stating that they treat everyone with dignity, don't present misleading information, and scrupulously follow rules and regulations.

Q: Why should a company be concerned about business ethics?

Galinsky: Having a moral compass leads to more effective business practices — whether in building sales, retaining employees, or reducing litigation and regulation costs. For example, people are usually willing to pay premium prices to feel good about the products they buy. Also, companies that follow certain moral codes attract better people — and these people often are willing to work harder with less compensation. It goes without saying that ethical companies are less likely to undergo the costly scrutiny of courts and regulators.

Q: Why do some people and companies engage in unethical behavior?

Galinsky: It's important to understand that people don't engage in unethical behavior when the incentives are small. They tend to engage in unethical behavior when the incentives are large. Keep in mind also that unethical behavior usually breeds more unethical behavior — because hiding that first misdeed usually requires more misdeeds — and for some businesses, like Enron, this can lead down a path that ends in destruction.

Q: How do you get people to adhere to ethical standards in business?

Galinsky: Moral behavior needs to be embedded in a supportive social infrastructure that promotes consistent behavior. For starters, company management can lead by example. A formal incentive structure for adhering to standards also goes a long way in establishing moral behavior. Communicating these standards with all stakeholders is critical, because an organization needs to show its stakeholders that moral behavior is a serious matter, further reinforcing these norms.

Moral behavior needs to be embedded in a supportive social infrastructure that promotes consistent

Q: Can incentives for certain kinds of behavior create ethical problems?

Galinsky: Incentive systems can both create and diminish unethical behavior. Large incentives can invite unethical behavior. And then there are weak sanction systems — those with low detection probabilities or small penalties — which are tragically ineffective and can corrupt normal behavioral regulators, such as guilt. In fact, one study found that when small fines were introduced to reduce a negative behavior (like being late), that behavior actually increased.

Small fines and the low probability of detection can alter decisions from being based on ethical considerations to

crass considerations simply based on economic concerns. This is why norms and culture matter so much.

Q: What's the importance of business ethics for executive leadership?

Galinsky: I'm afraid to say that much of my research shows that people in positions of power tend to become more egocentric and self-focused. This limits their capacity to understand the viewpoints of other people, which may provide needed insight. However, an ethical company that values the contributions of its employees is more likely to be innovative in the marketplace.

Q: How should business ethics affect employee behavior?

Galinsky: Milton Friedman once stated that the employees of a firm have the moral obligation to maximize shareholder value. Deviating from this directive, he believed, is like a form of taxation without representation, because shareholder money gets spent in ways that does not maximize returns. This, I think, needs to be tempered with a stakeholder theory of the firm, which deals with how employees interact with suppliers, partners, customers, and their co-workers - and these are all interactions that should be encapsulated in a company's code of ethics.

Q: What's the importance of business ethics in the boardroom?

Galinsky: Business ethics are critical for members of company boards, as these people should provide a great deal of moral leadership. But in some cases, board members turn a blind eye to developing problems, and this can make bad situations worse. Still, board members often find it difficult to fulfill their ethical duties, as [recent research](#) by my colleagues Ithai Stern and Jim Westphal shows. Board members who are zealous about fulfilling their duties often get punished by not being selected for boards at other companies.

Q: What role should legislation play in regulating business ethics?

Galinsky: Legislating some ethical behavior can help keep the marketplace free of monopolistic behavior and safeguard stakeholders such as partners, customers, and investors. What's more, a transaction between two organizations can affect other parties — and these externalities, as economists call them, are sometimes best addressed by regulation.

Cultural differences and different business practices around the world can present ethical challenges.

Q: Does the global economy change the rules of business ethics?

Galinsky: A company's core values should be put into practice regardless of where business is being transacted. That said, cultural differences and different business practices around the world can present ethical challenges. But in some areas, forward-looking companies have actually been able to improve conditions while still being competitive.

Q: How does the increased use of technology affect business ethics?

Galinsky: Some of the biggest issues with ethics and technology can be found in security and privacy concerns. Ethical companies do their best to protect company assets without making people feel stifled — and this balance is increasingly important for innovation and creativity.

About the Kellogg School of Management and Adam Galinsky

In 2006, the Kellogg School was ranked the No. 3 graduate school of business in the United States by *BusinessWeek* magazine. Adam Galinsky teaches and researches the subjects of management and organizations. He holds a Ph.D. in social psychology from Princeton University and an undergraduate degree from Harvard University.