BETWEEN
THE
LINES

TAPPING THE POTENTIAL OF 21ST CENTURY DOCUMENTS

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The Natural Business
Impact of Sustainability

The "gold" that smart companies mine from being green includes higher revenues, lower operational costs, and even lower lending rates from banks that see reduced risk in companies with carefully constructed environmental management systems. They also reap soft benefits, from a more innovative culture to enhanced "intangible" value, credibility and brand trust.
Daniel C. Esty and Andrew S. Winston, Green to Gold[1]

The days of viewing environmental advocates as tree huggers are long over. Today, sustainability is a global issue with social, economic and environmental consequences. As a result, individuals and organizations worldwide are attempting to hold on to something much bigger than a tree trunk—the world as we know it.

This is evident in the very definition of the word "sustainability": the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs. The reasons for pursuing sustainability are not only increasingly apparent, but also frightening.

According to the U.N., over the last 50 years, human activity has altered ecosystems faster and on a larger scale than at any time in history.[2] In addition, greenhouse gases are at record-high levels, destined to increase exponentially as developing markets continue to grow.[3] Natural resource consumption is also an issue, particularly as the global population expands and more nations improve their standard of living. If, for example, the entire world were to adopt the current Western lifestyle, we would consume the planet's resources three times over.[4] Even in areas of environmental progress, the challenges remain substantial. For instance, the U.S. has dramatically improved its waste reduction, yet we are still wrestling with the 60 percent increase in municipal solid waste that arose between 1980 and 2005.[5]

The good news is that eco-urgency has inspired people and businesses around the globe to make a difference. Present-day green developments include everything from recycling programs and packaging redesign to public-private partnerships and market incentives for decreasing greenhouse gas emissions. In all of these efforts, businesses are playing an influential—and growing—role.

From an Inconvenient Truth to a Business Imperative

For visionary CEOs, sustainability isn't a social movement, it's a core element of business. It's no more a fad than productivity improvement or revenue generation. As noted in a recent Gartner, Inc. report:

> Sustainability, including green IT, is about business value. It's a key competency and a transformation you can't afford to avoid any longer. Sustainability is growing in significance as we emerge from the recession financially damaged and more focused on risk, preparing for growth and the transition to a lower-carbon economy.[6]

Sustainability touches every area of business—manufacturing, product development, document management, energy use and more. It can be a component of compliance or a directive for production, a new revenue stream or a way to reshape the enterprise.

Take as an illustration, General Electric, which is developing future markets by investing billions in a strategy of "Ecomagination." Or Walmart, which has made reduced waste and improved efficiency a supplier mandate. Or Xerox, which has built product families around around recycled papers, remanufactured parts, and waste-reducing toner and ink. Or Toyota, whose Managing Director Hiroyuki Watanabe has said, "We have a basic notion that unless we find a solution for environmental problems, we will not achieve sustainable growth in the coming years."

Case studies from virtually every industry demonstrate that it's possible for earth-friendly initiatives to make a quantifiable contribution to both the environment and the bottom line. Combine those successes with the growing number of RFPs that have a sustainability requirement, the venture capital dollars directed toward alternative energy sources and the widening consumer preference for eco-friendly products and it's clear that being green can help you stay in the black.

Even in the face of adverse economic winds, sustainability allegiance remains strong. In a groundbreaking 2010 study of global CEOs conducted by Accenture and the United Nations Global Compact, 80 percent of the executives said that the economic downturn had raised the importance of sustainability. Furthermore, 81 percent stated that sustainability issues are now part of their company's strategy and operations. According to the study sponsors:

> As businesses address the challenges of the financial crisis, sustainability is being recognized as a source of cost-efficiencies and revenue growth. Additionally, many companies view sustainability as a critical element in driving growth in new markets.[7]

In addition, the survey's CEOs believe we'll reach a tipping point within a decade, fully meshing "sustainability with core business—in capabilities, processes and systems, and throughout global supply chains and subsidiaries."

The time to act is now. It is possible—even preferable—to enhance competitiveness by assuming greater environmental responsibility. Better document management can help. The key lies in the three pillars of document use: paper, printing and processes.

The Increasing Role—and Rolls—of Paper

In 1975, *BusinessWeek* ran an article that most of us today would consider fiction. It featured "the paperless office"—a concept linked to the growing popularity of PCs and other office automation tools. What happened in the two-plus decades following the article? Worldwide use of office paper more than doubled.[8] And it continues to increase today.

The average American office worker prints approximately 10,000 pages per year.[9] If the paper printed annually in the United States was stacked 10 feet high, it would form a wall that could stretch from New York to Tokyo, with 80 miles left to travel. Annual worldwide numbers are comparably staggering—in the vicinity of 2.2 trillion pages for 2010.[10] That's a lot of greenery and a lot of greenbacks.

Why, in a world that spins on a digital axis, is paper use growing? One reason is that paper has become more of a temporary medium. Almost half (44.5 percent) of the paper produced by office workers is for daily use, e.g., emails, Web pages and reference materials.[11] Rather than store hard copies, today's employees readily print, crumple and aim for a three-pointer in the trash can across the hall. As Abigail J. Sellen and Richard H.R. Harper succinctly put it in their book, *The Myth of the Paperless Office*, "We are not headed towards offices that use less paper but rather towards offices that keep less paper."[12]

Another reason for the surprising abundance is wasted paper in general. For instance, it is estimated that at least 30 percent of offset-printed materials go to waste (including those outdated brochures gathering dust in your warehouse).[13]

The impact of this paper explosion is twofold. From a business perspective, it expands your environmental footprint while restricting your bottom line. From a global perspective, the production of paper involves trees, water and energy. So both your environment and our environment are affected.

The Paper Edge: Saving More by Using Less

The 17th century German scientist Johannes Kepler observed that "nature uses as little as possible of anything."[14] When it comes to paper, your organization can follow nature's lead. The "paperless office" may be a dream, but an office that uses less paper is an achievable reality. Here are a few simple strategies that can help your organization get started:

- Use both sides of the sheet. Xerox was the first to introduce two-sided printing and copying (called duplex printing). By employing duplex printing as your enterprise's default setting, you can cut paper use by as much as half.
- Print multiple pages on one sheet. When employees are printing pages that have minimal text, large type or sizable graphics—such as PowerPoint slides—print multiple pages on each sheet. For instance, by printing four slides per page using the duplex option, you immediately reduce eight sheets to one.
- Be selective. Print only what you need when you need it, minimizing the waste generated by desktop devices and enterprise-wide printing services. And explore the use of external print-on-demand capabilities.
- Reach for the right paper. Look for papers certified by the Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI) and Programme for the Endorsement of Forest Certification (PEFC), all of whom partner with companies like Xerox to promote responsible forestry management. Seek out recycled papers and eco-friendly stocks such as High Yield Business Paper, which uses a chemical-free pulp process to produce twice the amount of paper from the same number of trees.
- Recycle and reuse paper across the enterprise. Make it easy for employees to recycle or reuse paper by placing collection bins in convenient locations throughout the enterprise. Then start spreading a company-wide message of reduce-reuse-recycle.
- Go digital. Read, send and store documents in digital form. Scan early and often. This not only decreases costs and minimizes hard copies, but can also significantly improve document-related processes because information is more easily accessed, shared, distributed, reviewed and stored.

Most of these measures are pretty basic. However, the business benefits they generate, including cost reduction and greater productivity, are anything but. Which makes them easy wins. One of our clients who did nothing more than use default duplex printing while implementing an internal green campaign reduced annual paper use by 32 percent.

Other organizations, such as the U.S. government, are achieving benefits on a grander scale. For example, electronic cash cards will soon replace Social Security checks for citizens without bank accounts, eliminating the production, handling, distribution and storage of about 144 million documents per year.

If it seems as though your organization has squelched the spread of paper through its expansive use of technology, consider this—simply by connecting an office to the Internet for email alone, you increase paper consumption by 40 percent.[15]

Clearly, it's time to place "the paperless office" on the Fantasyland shelf, nestled somewhere between Oz and Utopia. But the concept of a "less-paper office" is genuine and attainable—and can have a real-world impact.

Printing: How to Make an Eco-Friendly Impression

One simple way to reduce the amount of paper in an office is to reduce the number of devices that generate it. (Insert "duh" here.) Printers, copiers and faxes dot the modern business landscape like clover, yet many are redundant or idle for long periods of times. Our experience with document-driven processes has revealed that companies have an average of one printer for every two computer users. What's more, those printers remain inactive 98 to 99 percent of the time.

By reducing your company's employee-to-device ratio, you can significantly drive down energy costs. One way to do this is to replace single-function devices, such as printers, with shared multifunction devices that print, scan, copy and fax. This can cut energy consumption by 20 to 30 percent, while cutting down on ink cartridges and toner. In addition, if you replace older equipment with ENERGY STAR devices, you can decrease power consumption by approximately 70 percent. So both the environment and the enterprise realize savings.

One leading aerospace and defense firm that implemented multifunction devices was able to streamline its employee-to-device ratio from 2:1 to 8:1. Prior to the change, a Lean Six Sigma analysis of the company's document production revealed considerable redundancies. The client used the Xerox Sustainability Calculator to quantify the impact of potential improvements. Today, they are operating with 60 percent fewer document devices, enjoying 35 to 50 percent savings while using 27 percent less energy and generating 33 percent less waste.

Los Angeles Trade-Technical College (LATTC), one of the oldest community colleges in the country, addressed similar inefficiencies. A proliferation of independent desktop printers had resulted in a device-to-user ratio of 3:1. There were so many devices that the IT staff spent about half its time servicing them.

The printers were replaced with networked multifunction units, including some with vending stations. Innovative ColorQube® printers with solid ink technology were implemented in departments that produced full-color documents. (Solid ink is a crayon-like block of ink that melts during the printing process. It has no cartridge and uses single-pass image transfer, so it produces up to 90 percent less waste and consumes 30 percent less energy than comparable laser printing.)

Today, there are eight LATTC users for every multifunction device. Paper and consumable consumption are both down; two-sided printing is up. The savings in printer cartridges alone equals $250,000 a year, with $1.5 million in total savings expected within the first five years.

Greener printing is also paying off for Milwaukee Area Technical College (MATC). By replacing about 75 percent of its older stand-alone printers with multifunction devices, MATC cut the cost of consumables by a quarter of a million dollars. The college also installed a Streem Fax Server to convert incoming faxes to e-mail, plus Pharos Systems swipe-card software to manage payments for student printing. On top of that, Xerox Device Manager software monitors consumables usage and proactively identifies device issues. The college's anticipated five-year savings? $3.5 million.

More Steps for Your Carbon Footprint

In addition to streamlined printing services, there are a number of other strategies that can help make your company's document production environmentally friendly:

- Seek out eco-efficient inks and toners, such as EA Toner, which uses less toner mass and lower fusing temperatures, resulting in about 20 percent less energy consumption than conventional dry ink toners.
- Recycle empty ink and toner cartridges or return them to the manufacturer for reuse.
- Select office equipment that is designed with recycling or reuse in mind, such as devices with remanufactured parts.
- Look for vendors whose manufacturing processes reflect environmental responsibility. For example, at Xerox, we ship the waste and wastewater from our toner manufacturing operations to energy plants for reuse.
- Explore the use of digital production technologies, such as print on demand, which reduce wasted paper and energy by producing documents only when needed.

Aristotle said that nature does nothing uselessly. You can mirror nature's approach by implementing any one of the measures above. No matter which direction you take, it's destined to lead toward a better tomorrow.

The Xerox Sustainability Calculator

What You Subtract Adds Up

Xerox has been a major pioneer in sustainability since 1969. We introduced the industry's first two-sided printers and the first printers that power down. We also played a key role in establishing the U.S. ENERGY STAR program. Today, our environmental commitment remains strong, evident in our focus on remanufactured parts, recycled papers, internal recycling/reuse procedures and tools like our Sustainability Calculator.

The Sustainability Calculator is a "green audit" tool that helps businesses assess and lessen the financial and environmental impact of their print infrastructures. The calculator compares a company's current, baseline scenario with an optimal print environment, providing side-by-side reviews of energy consumption, greenhouse gas emissions and solid waste creation. For a big-picture view of how your output environment might benefit from a greener approach, visit www.xerox.com/sustainabilitycalculator.

Process: Purifying the Workstream

Throughout this book, I have presented a variety of business situations where a key function, such as accounts payable or regulatory compliance, has been significantly improved through better document management.

In all of these examples, the use of paper—and its corresponding energy demands and costs—decreased dramatically. Marriott's financial workflow. Trident Group's mortgage processing. Procter & Gamble's print production. Each represents a smarter process that contributes to a cleaner world.

Think of it this way: inefficient processes yield excess paperwork, which means wasted energy (both personal and electronic). Drive out your inefficiencies and you reduce your environmental footprint. You also gain a more secure foothold on your bottom line.

Digital document services like imaging and Web-based collaboration can help, streamlining processes while minimizing the need for hard-copy materials. Digital mailrooms can, too, employing a variety of scanning technologies to read, categorize and forward documents in electronic form.

Additionally, electronic data management products such as DocuShare® SMARTsend® and FreeFlow® Digital Workflow Collection can substantially reduce paper consumption, turning the print-then-distribute model into one of distribute-then-print.

Advancements like these also contribute to the environment in indirect ways. For example, they can eliminate the need to ship documents via ground or air, reducing emissions and fuel consumption. Or enable global collaboration without global travel. Or facilitate the expansion of a remote workforce, reducing the number of commuter vehicles on the road.

For instance, one state government's move toward Web and phone-based service for welfare applicants is not only decreasing paperwork, but is expected to mitigate 2 million vehicle trips to state offices each year. And our ACS PrePass® solution, which automates the forms and procedures for weighing and inspecting highway trucks, has helped eliminate approximately 4.3 million hours of roadside idling time in 2010 alone—conserving over 20 million gallons of fuel and saving more than $446 million.

Process improvements like these can help your organization move toward greater sustainability. While you may initially view sustainability as unaffordable, the dollars lost due to inefficient, non-green processes could be costing you more. Not to mention the cost of lost business due to factors like a lack of environmental compliance, an inability to compete in RFPs with sustainability mandates or the cold shoulder of consumers with an ecomind-set.

No longer the exclusive purview of utilities and government organizations, sustainability involves us all. It has evolved from a compliance issue to a commercial—and social—necessity. Within the next five years, sustainability is expected to emerge as a mainstream force that will drive innovation, growth and profit.[16] Which means it is destined to shape your business.

> *We do not inherit the earth from our ancestors, we borrow it from our children.*
> Native American proverb

Changing the Climate in Three Different Fields

$7 Million in Savings for an Information Storage Leader

Using many of the tools mentioned here, including smarter print management and multifunction devices, a $14.9 billion information technology leader was able to save over $7 million a year and keep more than 20 tons of waste out of landfills. The company reduced its cost per page by 55 percent while increasing its employee-to-device ratio by 35 percent.

85 Percent Cost Cut for One of America's Greenest Cities

The first U.S. city to earn ISO 14001 certification for its Environmental Management System is saving money and the environment due to 500 energy-efficient multifunction devices plus streamlined document workflows. Due the multifunction switch, employee productivity and device use are high while costs per page are low—in one case 85 percent lower than before.

43 Percent Less Energy for a Worldwide Chemical Company

A leading chemical company is reaping the financial and ecological benefits of globally managed print services that span 49 countries. The company also digitized over 5 million documents, dramatically minimizing hard copy duplication. As a result, the enterprise realized energy savings of 43 percent on office printing, avoided 133 tons of landfill and reduced CO_2 emissions by 1.4 million pounds a year.

Turning Over a New Leaf

Documents and their processes are only one component of an enterprise's green initiative. They should fit within a larger strategy that marries sustainability development to overall business development. Here are five ways you can begin to strengthen the bond.

Look up and down your value chain

You're not alone in the development and delivery of your products and services. The same holds true for your green initiatives. Look beyond individual internal functions for areas of improvement throughout your value chain. Are your source materials earthfriendly? Is your product packaging eco-efficient? Can your shipping processes be streamlined?

Leverage your partnerships and work with environmentally responsible suppliers and outsourcing providers. For example, Xerox has recycling/remanufacturing programs that have diverted more than 2 billion pounds of waste from landfills since 2001. When you consider all the links in your value chain, you can dramatically expand the reach of your environmental influence.

Identify short- and long-term opportunities

Use quantitative analysis tools and methodologies, such as Lean Six Sigma, to pinpoint problems and identify opportunities that will produce the greatest environmental benefit in the shortest time frame. Start with some of the easy wins mentioned earlier, such as two-sided printing, then work toward larger-scale endeavors. Run pilot programs to work out bugs. When a program begins, promote it. And don't be shy about touting your successes—they help create enthusiasm and engagement.

Establish environmental and economic metrics

Make sure your conservation proposals offer quantifiable economic and environmental benefits. Put metrics in place to measure the financial and ecological impact of any potential changes. As Xerox Vice President for Environment, Health and Safety, Patty Calkins often says, echoing Peter Drucker, "what gets measured gets managed."

This might mean evaluating things like cost in a slightly different way. For example, when Xerox implemented its remanufacturing strategy in the 1990s, we needed to design more cost into our parts to make them reusable. However, when you consider the extended life cycle of each part, money is saved over the long run. Had we limited ourselves to a lowest-cost-provider strategy, we would never have succeeded.

Make the sky the limit

If ever there was an opportunity for "blue sky" thinking, this is it. Literally and figuratively. Remove your limits and take a fresh look at your organization. Make "innovate" your mantra. Sustainability isn't just a means of enhancing what you're already doing. It's a way to achieve breakthrough results, including the introduction of revolutionary products and services.

ZipCar's hourly car rentals offer a great case in point. By digitizing paper processes and leveraging new technology, ZipCar is helping the environment while promoting a completely new business model—one that couldn't have existed 15 years ago.

Make a commitment

Sustainable development requires a long-term commitment. It demands buy-in at all levels, starting with your leadership team. Develop a sound strategy that reflects your environmental priorities, then stick with it. Win over employees with passion. Show them that their efforts are paying off—and recognize that what they're doing matters, not only to the business, but to the planet.

Balancing Ecology and Economy

Kermit the Frog was on to something when he sang, "It's not easy being green."

According to the previously mentioned U.N. Accenture study, the biggest challenge CEOs are facing in their move toward sustainability is execution. Yet execution obstacles must be addressed in order to leverage opportunities. Human nature and Mother Nature have no choice but to become allies. As Gartner, Inc. warns:

> In future histories, failing to embrace and exploit the opportunities of the sustainable transformation will look as irrational as resisting the emergence of steam or the internal combustion engine at earlier stages in the industrial revolution.[17]

The ecological revolution has begun and it's here to stay. As businesses work to integrate the movement's social, economic and environmental dimensions, it is important to remember that sustainability is not a means to an end. It is a way of doing business that requires continual effort and change. As Xerox CEO Ursula Burns has said, "Sustainable development is a race with no finish line. It requires leadership that sets high expectations and clear direction, partnerships that inspire collaboration and adaptation of sustainable business practices and innovation that constantly pushes the frontier of what is possible."

With each future success, sustainability will become a more powerful engine of growth, benefiting both the business world and the world at large. As that happens, more enterprises will view sustainability as something they seek rather than something they suffer.

But profits and growth capture only a portion of sustainability's real impact. Ask yourself this: How often in business are you presented with a chance to do something for your children? How often can your enterprise have a measurable effect on future generations through the actions it takes today?

When all is said and done, the true value of sustainability lies in its dual promise of prosperity and posterity. If we take even the smallest steps toward realizing that promise, we can make an enormous difference in the lives that follow ours.

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