



A New Strategy for Work: Lower costs and carbon emissions while increasing profits and employee morale



in partnership with



Authors: Libby Johnson McKee, Desiree Williams-Rajee,
Stephen Yogi Rueff, Manan Shukla - Bainbridge Graduate Institute
May 2009

U.S. firms are facing the worst business climate in 27 years. Some experts suggest that the global recession and credit crisis have made doing business harder today than during the Depression. Sluggish demand for goods and services and lack of credit are forcing companies to cut jobs and suspend capital investments. Against this backdrop, there is also a heightened awareness that carbon emissions are changing our environment through global warming. Regional, state and local governments are connecting the dots and are discussing the implementation of carbon taxes, emissions caps, and pollution standards. Carbon emission policies will result in real costs to businesses, if they don't already. So how does a company cut costs, while improving the workplace, and decreasing carbon emissions?

The answer is a new approach to business, moving to a different model that sustains the business financially, while sustaining its employees, community, and the environment. The elements of this new model are showing themselves more and more as businesses discover that success is not only found in profit, but also in purpose. Elements of this idea are not new. Consultants and leaders have been talking about concepts of “sustainable business” for a number of years. The difference today is technology has evolved to a point where it can support these concepts while decreasing costs. We call this concept BetterWork™.

A Context for Change: Carbon Emissions and Business

Before delving into the elements of BetterWork™, it is important to first understand the relationship between business and climate change. The science of climate change is undisputed. Greenhouse gases (GHGs) collect in the Earth's atmosphere and trap heat that once escaped into space. Carbon dioxide (CO₂) makes up the largest portion of GHGs. The accelerated concentration of CO₂ and the increase in trapped heat are due to human-related activities, primarily burning of fossil fuels. Trapped heat causes the Earth's temperature to rise in both air and sea. Experts

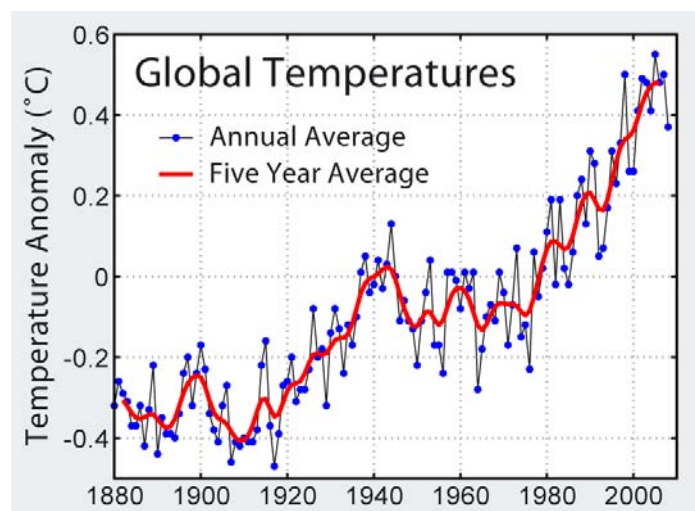


Figure 1: Trends in Global temperatures
Source: IPCC, 2007: Summary for Policymakers

expect between 2⁰ and 5⁰C rise in temperature by 2100. Temperature increases of this magnitude have the potential to cause a rise in sea level, flooding croplands and cities. Moreover, 23% of the world's population lives within 100 kilometers of the coast and less than 100 meters above sea level. Around the world, 12 of the 16 cities with more than 10 million people are situated on or near the coast.¹ The Intergovernmental Panel on Climate Change predicts that by 2080, millions more people will experience flooding every year due to sea level rise, in addition to intense weather events such as tropical storms and cyclones, extreme waves and storm surges, and salinization of ground water in many coastal areas. The impacts of such changes are “virtually certain to be negative” and could include limiting where people can live and where crops can be grown, increasing competition for habitable and arable land. In addition, some plant and animal species could become extinct if they are unable to adapt to the rapid changes in temperature.

There is widespread agreement that reducing our carbon emissions is the only way to prevent or slow down the temperature change. The sources of carbon are very well documented and can be divided into Industry, Buildings and Transportation. The “Buildings” category includes heating and cooling as well as construction. “Transportation” includes the movement of goods and people by cars truck, railroad, sea

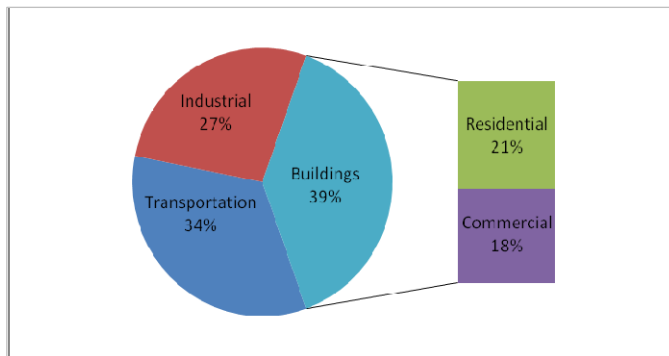


Figure 2: Total US CO2 Emissions by Sector

vessel and air. “Industry” includes the manufacturing and production of goods and extraction of raw materials. Not surprisingly, these match directly to business costs. Plant, Property and Equipment, Utilities, Office Rent/Real Estate, Travel, Shipping are typical business expenses that coincide with the sources of carbon emissions. In an effort to curb GHGs, government entities are

beginning to formulate policies to tax or cap these

emissions. These policies will have a direct effect on business costs. There is an immediate opportunity to look for links between expenses and emissions—decrease both and stay ahead of coming regulation.

There is a real possibility of meeting business needs while concurrently reducing emissions through less corporate travel, commuting, and office space by using video conferencing and improved telecommunications systems.

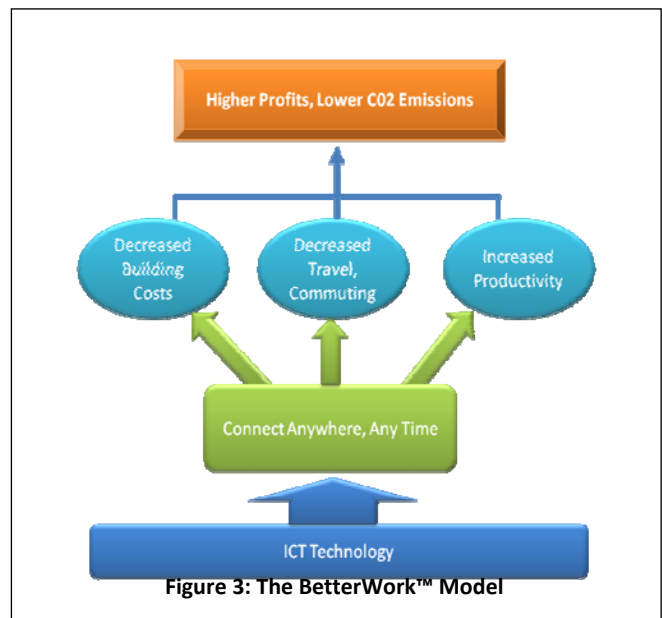
¹ IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment, Topic 6* (May 2007) pg 319

What is BetterWork™?

BetterWork™ is a triple bottom line (people and planet, as priorities alongside profits) framework that starts with addressing the nervous system of a business: Information and communications technology (ICT) or telecommunications. There are 3 layers of the telecom strategy: the infrastructure (phone lines, switching, connections, data centers); the endpoint tools (telephones, mobile phones, fax machines and computers) and the software that links each of these tools together. Combined, they create unified communications, which in essence, is the ability to receive, send or respond to any message regardless of what tool was used to create it. For example, a user could receive a voicemail message as a text message on their phone and reply to it using email. The software, infrastructure, Internet and end point tools handle the conversion and delivery, enabling users to connect and communicate from anywhere on any device at any time of day.

The outcome is increased flexibility and mobility. Work can now happen where and when it is most convenient, which in turn, releases a company from traditional offices and methods of working. Based on our research, adopting this model and method of working can deliver real cost savings in operating costs and, perhaps even more importantly, happier, more productive employees and reduced carbon emissions.

These are the three elements of the BetterWork™ model – reducing building costs, reducing transportation, and increasing productivity and morale. Each one has implications for the triple bottom line, for CO2 emissions and for corporate culture.



The BetterWork™ Infrastructure: A Smart Technology Base

BetterWork™ requires an upgrade to modern, digital telecommunications equipment. The good news is technology solutions are available today that use significantly lower amounts of energy and can bring cost savings compared to current systems. The two types are found 1) inside businesses in the form

of communication tools (phones, cell phones, PBX switching boxes, etc) and 2) outside in the network and infrastructure provided by the telecommunications companies.

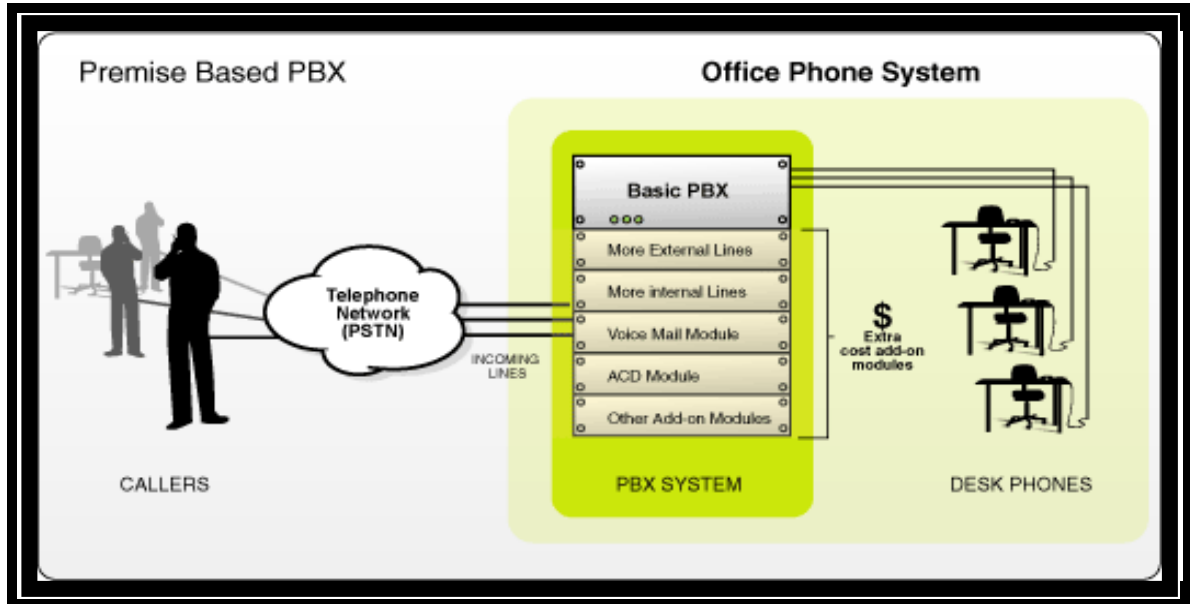


Figure 4: Analog phone systems using a traditional PBX
source: <http://www.virtualpbx.com>

Inside businesses, older systems are typically expensive to run, not extendible and use more energy than needed to do the same job as technology available today. The standard setup today for most small and medium sized businesses (SMB) is still a connection to a PBX machine, which is centrally located somewhere in the office space. A traditional premise-based PBX system requires numerous parts: switching network, microcomputer, power cards, telephone lines, switchboard, Uninterruptible Power Supply (UPS), wiring, and of course, space (cabinets, vaults, etc.). Each employee's annual electricity consumption is over 17 kWh and each PBX needs an uninterrupted power system (UPS) that also requires electricity and additional cooling. The energy consumption for cooling via HVAC for the PBX systems can be upwards to 16 kWh per employee annually. For a traditional SMB, network data communications (Routers, Internet, wires, cooling) require infrastructure separate from the telephony systems. This category represents an additional 7% of total energy consumption within the SMB.

Advances in the external infrastructure to support this connectivity are rapidly expanding. Since 2002, the external infrastructure that moves data and voice packets from one device to another (example: a phone call from LA to Chicago), has steadily been moving to Voice over Internet Protocol (VoIP)

standard. VoIP is a protocol and a general term for simple voice communication delivered over the Internet. Sometimes referred to as Internet phone, broadband phone or unified communications, VoIP-enabled systems use the Internet to connect to the Public Switched Telephone Network (PSTN) to deliver calls between computers, cell phones, landlines or any other device. Because VoIP uses a converged, packet-based, efficient network, calls are often cheaper. The move from physical switching to VoIP has decreased energy usage dramatically and will continue to do so as older switching boxes are replaced. British Telecommunications (BT) expects its “21st Century Network” to reduce the number of switching centers from 3000 to between 100 and 120 in the coming years. Additionally, these IP-based centers can tolerate a wider range of temperatures, meaning data centers can be cooled by fresh air rather than air conditioning².

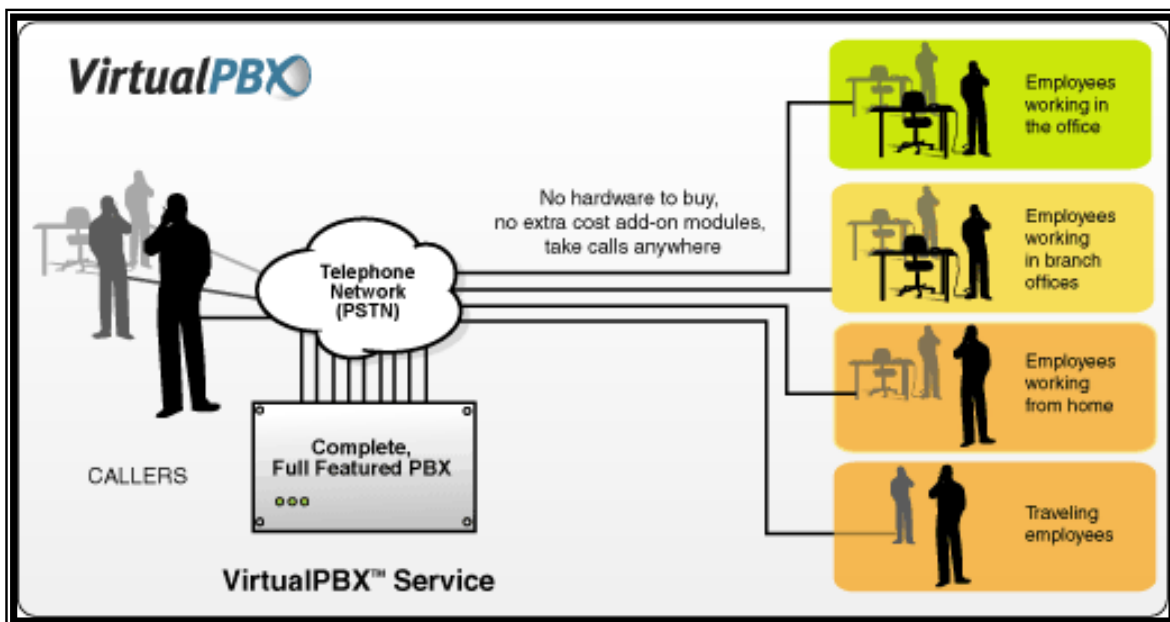


Figure 5: Migration to digital systems using Virtual PBX.

source: <http://www.virtualpbx.com>

However, even as this technology is readily available, a recent estimate by a major telephone carrier product group noted that over 90% of business users still use “traditional” solutions (POTS lines, PRIs, Split T1s connected to conventional, non VoIP customer premise equipment) inside the business premises. This represents an opportunity for companies to realize the benefits of switching to Virtual PBX systems where services and applications are easily and cost effectively provided outside the walls of the

²

ICT (Information and Communication Technology) and Climate change

http://www.itu.int/itu-news/manager/display.asp?lang=en&year=2008&issue=01&ipage=ict_and_climate_change&ext=html

business. In a premise-based system, businesses purchase a suite of services as add-ons to their telephone switching box or PBX, or receive them through traditional, inflexible PSTN-based systems. The PBX box is large, expensive and needs space and cooling onsite. In a Virtual PBX system, those same services are available, but the switching and feature delivery happens off site.

Network-based telephony applications over VoIP such as virtual PBX, unified communications and other features can facilitate tasks and provide services that may be more difficult to implement or more expensive using the PSTN. Examples include³:

1. **Easy addition of phone lines** - The ability to transmit more than one telephone call over the same broadband connection, meaning an extra telephone line can be easily added to a home or office.
2. **Included Features** - VoIP includes conference calling, call forwarding, automatic redial, and caller ID, which traditionally are added for a fee.
3. **Embedded Security** - Using standardized protocols (such as Secure Real-time Transport Protocol) and creating secure phone connections, like digitizing and digital transmission, are already in place with VoIP and are done by encrypting and authenticating the existing data stream.
4. **Location independence** - VoIP telephony only requires an Internet connection for service. For instance, call center agents using VoIP phones can work from anywhere with a sufficiently fast and stable Internet connection – however, as VoIP is not ubiquitous, Quality of Service (QoS) is very important and remains one of the challenges to VoIP services.
5. **Integration with other services available over the Internet**- including video conferencing, message or data file exchange in parallel with the conversation, audio conferencing, managing address books, etc.
6. **Low Cost Advanced Features** - Advanced Telephony features such as call routing, screen pops, and IVR implementations are easier and cheaper to implement and integrate.

In addition to added benefits and lower cost, VoIP-based telecommunications create the platform for business owners to move their companies one step closer to being carbon neutral. The actions

³

Adapted from Wikipedia: Voice over Internet Protocol

[http://en.wikipedia.org/wiki/Voice over Internet Protocol](http://en.wikipedia.org/wiki/Voice_over_Internet_Protocol) retrieved 11/6/08

required to make the switch are upgrading their telephony equipment, removing onsite equipment by leasing or outsourcing services to off premises vendors, and using teleconferencing to decrease business travel and commuting. Each of these elements typically has a very quick return on investment, ranging from immediate to 1-5 years, and the enhanced services can increase employee productivity significantly.⁴

The Elements of BetterWork™: Carbon Emission Reduction & Increased Employee Productivity

Beyond cost savings and cool phones, modern telecommunications offers benefits that can change the way we work. BetterWork™ builds off the base of flexibility and mobility enabled by unified communications, removing the need to provide a desk and office space for each employee every day, and reducing overhead costs and carbon emissions from heating and cooling buildings. Once employees are able and allowed to work from anywhere through maintaining a high level of communication, commuting and business travel can be reduced saving fuel and lowering CO2 emissions. Finally, when employees are free to work when and where they want, measured by their contributions and not by time in the office, morale increases, turnover drops and productivity climbs, adding savings in recruiting and employee costs to the bottom line.

We're Wasting Away...

Number of hours Americans waste each year sitting in traffic = 4.2 BILLION

Source: Texas Transportation Institute

Estimated cost to the U.S. economy: \$78 Billion

Source: American Society of Civil Engineers

Lifting the Burden on the Building

A typical office space for an SMB demands a significant amount of energy consumption. According to the EPA, the average annual energy intensity for office buildings is 79.8 kBtu per square foot and the average cost is \$1.65 per square foot. Of the total energy consumption, 66% is for electricity and 34% is for natural gas and other fuels. This translates to 15.5 kWh of electricity and 0.27 therms of natural gas per square foot of office space⁵

4

Estimate based on 20% savings in operating costs, 15% decrease in HVAC and 10% of employees traveling one less trip per year.

5

¹ National Action Plan for Energy Efficiency Sector Collaborative on Energy Efficiency Office Building Energy Use Profile
www.epa.gov/solar/documents/sector-meeting/4bi_officebuilding.pdf

TYPICAL OFFICE EQUIPMENT	
Device Type	% of Annual Energy Consumption
Server Computers	13%
Telephone Network Equipment	7%
Computer Network Equipment	7%
UPSs	6%
Monitors	19%
General Displays	4%
PCs	20%
Copiers	10%
Printers	6%
Other	8%
Total	100%

Table 1: Percentage of energy consumption of standard office equipment

The average employee office space uses 239 usable square feet per person.⁶ For a medium sized enterprise (500 employees), this would require nearly 120,000 usable square feet of office space, resulting in nearly \$200,000 for energy costs. Significant infrastructure is necessary for an office space to function. Of the total energy costs, 20% are for office equipment and 23% for heating and cooling.

For most office environments, employees are provided with their own desk, computer, and telephone. To accommodate for this space, significant

office equipment is necessary to support the employee: PCs and Workstations, Monitors and Displays, Copiers, Telecommunications Networks, Computer Networks, Printers, and Uninterrupted Power Systems (UPS). Table 1 presents the breakout of energy consumption for office equipment.

At Sun Microsystems 55% of its total workforce -over 19,095 employees – now participate in a BetterWork type environment, called OpenWork. Sun employees work from home at least 1-2 days per week. However, when needed, employees use Sun Microsystems transitional office space, known as “hotel” offices. This change in employee work culture has changed the need for office space dramatically. The allocation for home-assigned employees is a ratio of 10 employees for 1 office. The Sun employees work from home at least 1-2 days per week translates into a 4:1 employee to office ratio. This created a huge reduction in the need for office space and has produced a significant reduction in energy and water usage.

6

⁶ GSA Office of Government wide Policy- Real Property Performance Results, December 2002
<http://www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8203&channelPage=%252Fep%252Fchannel%252FgsaOverview.jsp&channelId=-14861>

In fiscal year 2007 alone, Sun was able to reduce their real estate holdings by 15% (2.7 million square feet) and save \$68 million in real estate costs. The subsequent reductions in building energy use and commuting are estimated to have saved 23,868 metric tons of CO₂.⁷

Reducing the Travel Footprint

Carbon emissions related to employee travel, commuting and business trips, contribute to a large margin of a company's overall carbon footprint. Cars are part of the American lifestyle, and commuting is part of our work culture. In 2001, US car ownership was 618 cars per 1000 people⁸. Through 2005, this number grew at a rate of 1% per year and is projected to continue at this rate into the future⁹. The typical U.S. employee driving to work emits an average of 0.7 pounds of GHG per passenger mile. In the United States, an average employee commutes five days a week and drives 43.5 miles per week, totaling 4.76 tons of CO₂ per employee, per year. Therefore, if every U.S. worker would telecommute a mere 1.6 days per week, this action would save 1.35 billion gallons of gasoline, preventing 26 billion pounds of CO₂ from being released into the atmosphere.

Another benefit of reduced commuting is tangible money savings for employees. In 2007, Sun employees saved an average of \$870 per year in gasoline and around \$1,770 dollars in wear and tear on their car (by driving 3,700 fewer commute miles). This means that over \$2600 dollars can be put back into local economies or personal savings. In perspective, the 2008 household stimulus check totaled, at maximum, \$1800 for a family of four.

As with commuting, the American work culture places a high value on client meetings being held face-to-face. If a company reduces sales or networking meetings, this is considered a cost-cutting measure and might be perceived as financial weakness or disrespectful toward prospective clients. Therefore, business travel is required for small to medium businesses (SMBs) and most of this travel occurs by air. One cross-country flight from LA to New York emits 3,000 pounds of CO₂, almost a pound of CO₂

From Workplace to Anyplace

*"Increasing virtual meetings and telecommuting today could...help to save more than 3 billion tons of CO₂ emissions in a few decades; which is **equivalent to half of the current US CO₂ emissions.**"*

World Wildlife Fund Report
March, 2009

⁷ Interview with Matt Eshelman, on February 18, 2009

⁸ World Wildlife Fund, March 2009, *Workplace to Anyplace, Assessing the Opportunities to Reduce Greenhouse Gas Emissions with Virtual Meetings and Telecommuting*, page 57

⁹ *ibid*

emissions per mile flown. Business travel contributes significantly to the total GHG emissions for a business. If 20% of business travel is replaced by a non-travel solution (e.g. a video-conference), it will decrease travel costs and lost productivity. This travel reduction will also reduce GHG emissions by approximately 22.35 million pounds of CO₂ per year. In fact, Accenture saved nearly \$8 million dollars and 2,000 tons of CO₂ by utilizing technologies such as web conferencing.

As companies consider the future costs of business related carbon emissions, travel will inevitably become a primary area of consideration as it has high potential to reduce carbon footprint. A company can re-define their corporate culture and brand values to reflect a commitment to GHG reductions. This could take the form of announcing a reduction in business travel and replacing it with video conferencing. In doing so, a company can position itself as a living up to its principles and as a committed business leader in reducing GHG emissions.

Cisco Systems adopted a BetterWork™-type of model for many of the reasons cited above. They saw the Internet and their digital network as a way to save money and the environment. By using a high definition virtual meeting product called TelePresence, in 18 months they eliminated travel for 20,000 meetings, which saved \$90 million in costs and significantly decreased CO₂ emissions.

“Teleworking, it seems, is as good for the company as it is for employees. In a recent survey of nearly 2,000 employees, Cisco found a slew of benefits to its flexible work program. The company's workforce now telecommutes an average of 2 days per week, resulting in a more productive, engaged workforce as well as generating significant savings for the company: Cisco's strategic consulting arm found that the company has saved \$277 million costs by allowing employees to telework.

The survey found that 40 percent of employees are not located in the same city as their direct manager, while 83 percent of teleworkers said that their ability to collaborate and communicate with colleagues and supervisors was as good if not better than if they were working in a central office.

Additionally, the quality of work from telecommuting employees was not hindered by remote working: 69 percent said their productivity was higher, and 75 percent said their work was more timely when working remotely; overall, 67 percent said telecommuting improved the quality of their work.

As a result of Cisco's flexible work program, 80 percent of those surveyed said it improved their quality of life, and 91 percent said telecommuting was somewhat or very important to their overall job satisfaction. On top of the employee satisfaction and retention benefits and the overall corporate savings from the alternative work plan, teleworking decreased Cisco's company-wide emissions by more than 47,000 tons through avoided travel, and employees saved an accumulated \$10 million per year in fuel costs.”¹⁰

Commuting and air travel—and their related costs to business—all can be reduced while maintaining high productivity, reducing carbon emission load and strengthening a company's brand identity. Since over two-thirds of the CO2 emissions in the U.S. are from transportation and buildings, there is a cumulative impact that BetterWork™ will have on reducing costs and greenhouse gas emissions, which translates to direct financial benefits for both the company and its employees.

BetterWork™ Culture: Expanding Human Capital Potential

BetterWork™ Culture addresses the changing needs of the workplace by enabling employees to work smarter, not harder. The BetterWork™ technology infrastructure that allows connectivity anywhere, anytime enables employees to be in charge of their production tempo, working when there is need and taking a break when there is a lull, while still meeting business objectives.

Sun Microsystems

At the beginning of the Open Work program at Sun, they faced challenges on two fronts. First, the technology was not ready. An employee needed to be on site, inside the Sun firewall, to be productive. Secondly, managers were nervous about removing a level of control (the requirement to be in the office) and about the change in how they managed remote workers. In a flexible work system, work becomes results-based rather than determined by “face time”, which challenges the traditional concept of work. Managers had to be more clear and concise when defining work and the expected results. They now report spending more time planning projects and assigning work and that there are less casual assignments that may not fit into the overall goals. The new work model has demanded more and better management skills from them than in the past. Better management and clearer measurement criteria have also put more responsibility on employees to deliver and it is easier to see who is contributing and who is not.

Over time, both the technology and the culture have evolved to enable companies to take full advantage of the benefits of mobile work. Anywhere there is an Internet connection there is a potential office. This idea has big benefits for employers. They are able to hire talented people outside the geographic area of the company, reduce office space, parking, and energy usage, and reduce travel expenses while increasing their ability to hire and keep top talent. Ann Bamesberger, VP of OpenWork Systems at Sun Microsystems says “If people can virtually carry their office around with them, why should it matter where and when they work if they are meeting their goals?”¹¹

The freedom, employees say, is changing their lives. They don't know if they work fewer hours – they've stopped counting – but they are more productive. That's welcome news for a company that hopes its employees will give it a competitive edge.

TIME Magazine
July 18, 2005

Happy employees are productive employees. Companies with highly motivated workers enjoyed a 3.7% increase in operating margins and a 2% rise in net profits, while companies with a lower level of worker commitment saw both measures decrease slightly. Yet, according to a 2007 Towers Perrin study,

11

Interview with Ann Bamesberger, December 9, 2008. Most information about Sun's OpenWork Program are from this interview or an interview on February 11, 2009 and the Sun website.

only 29% of US employees are engaged in their work.¹² Flexible work programs are designed to increase engagement and satisfaction.

CASE ANALYSIS – The Impacts to SME’s Moving to a Cloud-Based Communications Infrastructure

Modeling a typical 25-employee company with 2 potential scenarios: Scenario A, the proxy, assumed continued use of a traditional premise-based PBX system with all employees driving to work 5 days a week. Additionally, it was assumed the firm takes six business trips annually. Under Scenario A, the 25-person firm emitted nearly 600,000 lbs of CO2 annually.

Scenario B assumes the same company embraces the BetterWork™ framework and technologies, replacing the traditional, premise based PBX system and moving to an entirely Cloud based telephony system, while stepping up the use of integrated audio/web/video conferencing services. After implementing these technologies, the firm was able to reduce commuting travel miles by 50% and it also reduced air travel by 50% through the substitution of conferencing and other communications technologies, holding some meetings virtually.

Under Scenario B, the business emitted a much lower 415,000 lbs of CO2, reducing its CO2 emissions by 183,772 lbs annually or over 30%. These savings are equivalent to the emissions of nearly 10,000 gallons of gasoline or nearly 200 barrels of oil consumed. By making the switch to more innovative and flexible technologies, the firm is able to reduce building space, and, utilizing flexible working arrangements, the firm realizes cost savings in many other areas related to employee retention, health care costs, etc., with almost \$60,000 in annual savings to the enterprise! BetterWork™ is better for the employee, better for the bottom line and better for the environment – win win win.

Best Buy

To address this gap between motivation and productivity and support the change from retailer to service-added organization, the electronics superstore BestBuy began to transform its organization about 6 years ago. Jody Thompson and Cali Ressler were two HR people working at the corporate headquarters. They saw intense pressures on the workforce during the high growth period of 2000 and wanted to find a way to improve the BestBuy work environment. Ressler and Thompson looked to develop a workplace at the BestBuy corporate campus where some employees would have the freedom to choose their work location and schedule, and were given the tools to accomplish assigned objectives. The program they developed became known as a Results Only Work Environment or ROWE.

In ROWE, “each person is free to do whatever they want, whenever they want, as long as the work gets done. The old rules that govern a traditional work environment—core hours, “face time,” pointless

A freelance lifestyle in a corporate workplace

Employees can do their jobs at home or in Starbucks, first thing in the morning or in the middle of the night. One of the hallmarks of a ROWE is that a person who goes home at 2 p.m. is not leaving early, while someone who arrives at that time is not late.

Reuters
May 29, 2008

12

MarketWatch, *Show me you care*, October 21, 2007

meetings, etc.—have been replaced by one rule: focus only on results.” said Ressler.¹³ At first glance, this idea does not seem like the best way to run a billion dollar retail business. However, BestBuy reports a 41% increase in productivity and a 90% decrease in voluntary turnover. Within one month of switching to ROWE, productivity in the BestBuy.com division jumped, as much as 35%, and more importantly, so did engagement and job satisfaction. "For years I had been focused on the wrong currency," says J.T. Thompson, Senior VP and General Manager of BestBuy.com. "I was always looking to see if people were here. I should have been looking at what they were getting done."¹⁴ Reducing turnover means money saved. Prior to implementing ROWE, the 2005 per-employee cost of turnover was \$102,000. Once Best Buy's 4,000-person headquarters is completely converted to ROWE, the company stands to save about \$13 million a year in replacement costs.

Results Only Work Environment: A transformation spotlighting and rewarding productivity and job requirements, not time at work or scheduling, and customized at the work-group level.	
FROM	TO
A focus on <i>work hours</i> (just being there or 'face time')	A focus on <i>job requirements</i> (doing work well and on time)
Supervisor sets hours, schedules	Individual and Team set hours, worktimes, schedules
Meetings are a regular part of work routine	Meetings held only as needed
Reliance on face-to-face interaction	Varied methods of virtual and transparent communication
A "reactive" orientation, dealing with crises as they occur	Pro-active, early planning to avoid crises where possible
Flexibility arrangements negotiated between individual and supervisor	Flexibility is the "norm." Team members cross train to cover for one another and set schedules
If work needs are met, presence still required	Customized worktime & schedules aimed at achieving goals
Essential ingredient: <i>Tracking employees' time spent working</i>	Essential ingredient: <i>Define specific nature of job and expectations</i>
Problematic: Absenteeism, tardiness, presenteeism	Problematic: Not meeting job deadlines, expectations

Table 2: (November, 2007) excerpted from *Learning from a Natural Experiment: Studying a Corporate Work-Time Policy Initiative*.
Phyllis Moen*, Erin Kelly, and Kelly Chermack, University of Minnesota

The transition to ROWE is still underway and there are plenty of skeptics and opposition in the company. Similar to Sun, BestBuy managers thought it was just flex time with a new name and would turn the company into a paradise for slackers. Employees suspected a plot by HR to wring more hours from them and blur the line between work and home. In fact the opposite has turned out to be true and more

13 Interview with Cail Ressler and Jody Thompson, from the Blog of Tim Ferriss

14 Conlin, M., Smashing the Clock, Business Week, December 11, 2006

departments are switching over. BestBuy employees participating in ROWE report that they:

- Do less low-value (unnecessary) work
- Have lower turnover intentions
- Experience less interruptions at work
- Feel less pressure to work overtime
- View the work culture as being family friendly
- Have greater organizational commitment
- Report more job satisfaction

Additionally, managers looking for ways to oversee a multi-generational workplace have seen ROWE as one answer. “Gen Y’ers are living and communicating this way before they enter the workplace. They’re not used to being in just one place doing work—to chain them to a cube and tell them when and where their work will happen is completely unproductive,” said ROWE co-founder Ressler. “ROWE is the answer to Gen Y.”¹⁵

Transitioning to BetterWork™

It is important to be transparent. BetterWork™ might not be suitable for every employee, nor does it work for every type of job. It is mainly a solution for service industry positions, which account for 55% of total jobs in the US. Jobs that require workers to be on site like production or manufacturing or those requiring workers be present together may not fit well with this work environment. However, this should not discourage considering BetterWork as a solution; this should not be looked at as an all or nothing approach. Sun recognizes even further delineations within its workforce, and does not require OpenWork for everyone. The approach is determined on a case-by-case basis. There are employees that prefer to work in an office and this is accommodated in order to support their productivity. The opposite should be considered for those who are currently confined to an office space that might not need it.

It is also important to re-emphasize that managers hold the responsibility to implement BetterWork™. Their buy-in and understanding is key to the success of BetterWork™ Culture implementation. In addition to redefining the concept of work, managers face two major challenges: 1) employees have the potential to be “always on” because the technology is connected 24/7; and 2) recreating the “work community” that is developed through time spent in face to face contact with fellow

15

Rose, J., *Work like it's Saturday*, American Executive, June 30, 2008

employees. These new challenges will require both discipline and creativity, but are addressable and well worth the benefits.

BetterWork™ represents the goal we have all been seeking: work-life balance. Technology can now enable us use time more effectively than spending it commuting. The impact is not just in GHG emission reduction, but in an improved quality of life. Sun found that its U.S. employees worked at home an average of 2.1 days per week in 2007. This resulted in time savings of 104 hours or almost 2 and half weeks, more than most people take in vacation¹⁶. Employees split this time in how they used it; 60% went back to them personally, and 40% went back to the company. The gain in personal time has the potential to be reinvested into families, the community, and local economies, which means that this work structure can extend positive impacts beyond just the company's walls. The fact that employees also gave back to their companies on their own time supports what Tracy Fenton, from WorldBlu, calls a "democratic workplace".¹⁷

Democratization of the workplace entails entrusting employees to make work habit decisions that best reflect their productivity potential. It changes the assumption that employees are just freeloaders waiting to happen; rather they are a capital investment in talent, and they seek to perform. It puts the onus back on management to ensure productive use of staff potential. When a company begins to respect its employees' contributions and lives, loyalty is generated; and when you support employees to determine for themselves how and when to meet project goals, creativity is generated. BetterWork™ enables the more democratic, happier, and productive workplace to be realized.

BetterWork™ Today for a Better World Tomorrow

The equation for BetterWork™ is elegant: Reduce overhead costs in buildings and travel expenses, which decreases a company's carbon footprint; allow for job flexibility and a merit based work environment, which results in happier more productive employees; and a company increases profits.

¹⁶ Samson, T. Sun, Employees find big savings from OpenWork Program, InfoWorld, June 19, 2008, retrieved, Feb 27, 2009 from http://weblog.infoworld.com/sustainableit/archives/2008/06/telecommuting_s.html

¹⁷ Worldblu web site: *What is Organizational Democracy?* Retrieved November 11, 2008 from <http://www.worldblu.com/organizational-democracy>



People wonder, “Could it be that simple?” In truth the biggest hurdle is accepting that it is possible. Adopting the infrastructure without committing to the cultural change will limit the possibilities that can be realized. Realistically, cultural change will require directives that start from company leadership, and are supported by management training and the new internal processes to ensure transparency and accountability. But taken as an investment in capacity, the returns will be profound and long lasting.

Bibliography

¹ (2007, May) IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* pg. 2

² “Microsoft to add more PBX features to UC suite” IT World Canada, Solomon, Howard 10/22/2008 <http://www.itworldcanada.com/a/News/4a4963c7-92ea-43d4-945a-577cca5861a8.html> retrieved 11/19/08

³ Adapted from Wikipedia: Voice over Internet Protocol http://en.wikipedia.org/wiki/Voice_over_Internet_Protocol retrieved 11/6/08

⁴ Estimate based on 20% savings in operating costs, 15% decrease in HVAC and 10% of employees traveling one less trip per year.

⁵ *National Action Plan for Energy Efficiency Sector Collaborative on Energy Efficiency Office Building Energy Use Profile* Retrieved on November 1, 2008 from www.epa.gov/solar/documents/sector-meeting/4bi_officebuilding.pdf

⁶ (2002, December) GSA Office of Government wide Policy- *Real Property Performance Results*, Retrieved on November 1, 2008 from <http://www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeld=8203&channelPage=%252Fep%252Fchannel%252FgsaOverview.jsp&channelId=-14861>

⁷ Interview with Ann Bamesberger, December 9, 2008. Most information about Sun's OpenWork

⁸ (2009, March) World Wildlife Foundation: *From Workplace to Anyplace: Assessing the Opportunities to reduce Greenhouse Gas Emissions With Virtual Meetings and Telecommuting* pg. 57

⁹ Ibid

¹⁰ Interview with Ann Bamesberger, December 9, 2008. Most information about Sun's OpenWork

¹¹ Coombs, M. A., MarketWatch, Oct 21, 2007 *Show me you care: Just 1 in 5 workers are 'engaged' -- and most want more from executives*, Retrieved February 27, 2009 from <http://www.marketwatch.com/news/story/few-workers-engaged-work-most/story.aspx?guid=%7BF43DB94E-797D-4D26-9593-0B0C65948F76%7D>

¹² Ferriss, Tim The Blog of Tim Ferriss, May 12, 2008 No Schedules, No Meetings--Enter Best Buy's ROWE - Part 1 and 2, retrieved February 26, 2009 from <http://www.fourhourworkweek.com/blog/2008/05/21/no-schedules-no-meetings-enter-best-buys-rowe-part-1/>

¹³ Conlin, M. Business Week, December 11, 2006, Smashing The Clock: No schedules. No mandatory meetings. Inside Best Buy's radical reshaping of the workplace, retrieved Feb 25, 2009 from http://www.businessweek.com/magazine/content/06_50/b4013001.htm

¹⁴ Rose, J., *Work like it's Saturday*, American Executive, June 30, 2008, Retrieved May 12, 2009 from http://www.americanexecutive.com/index.php?option=com_content&task=view&id=6762

¹⁵ Worldblu web site: *What is Organizational Democracy?* Retrieved November 11, 2008 from <http://www.worldblu.com/organizational-democracy>

Other Resources

(2008, June) *Energy Information . Annual Energy Outlook 2008 with Projections to 2030*. Retrieved on October 31, 2008 from <http://www.eia.doe.gov/oiaf/aeo/demand.html>

AMI-Partners: Global Market for PBX Solutions for SMBs to Cross US \$6.7 Billion This Year, Business Wire, March 7, 2007; Retrieved on 11/21/08 from http://findarticles.com/p/articles/mi_m0EIN/is_/ai_n27287930

(November, 2007) Moen, Phyllis; K., Kelly, E.; Chermack, K., *Learning from a Natural Experiment: Studying a Corporate Work-Time Policy Initiative*, University of Minnesota.