Organizational Effectiveness at the University of Washington

Quick Facts on UW Organizational Effectiveness

- The UW currently saves well over $70 million each year as a result of energy conservation, improved purchasing practices, streamlined processes, and other efficiency measures.

- In the last ten years, we have avoided over $95 million in energy costs on the Seattle campus alone and we currently divert over half our waste from landfills through recycling and composting efforts, saving money and the planet.

- Finance & Facilities (F2) has 140 Lean projects under way, including internal process improvements and external projects in which F2 practitioners help others launch Lean efforts. Other UW groups are also getting help to be more efficient and effective from the Provost-sponsored Organizational Effectiveness Initiative (OEI). The OEI organizational development consultants work on many projects across campus and are on track to provide a 10:1 return-on-investment.

- Switching from paper-based to automated systems in areas such as admissions, payroll, purchases, and electronic reimbursements is saving hundreds of thousands of dollars and allows staff to focus on higher-value, mission-focused work that supports students, teaching, and research.

- Enterprising teams such as Ceremonies and Creative Communications have found ways to increase revenue by providing new or improved services and products.

Executive Summary

At the University of Washington, administration in both academic and support units exists for one purpose—to serve the needs of students and faculty, allowing them to focus on our combined mission of education, research, and service. We are creating a robust but lean infrastructure to do just that, improving services and saving time and money, across all levels of administration. We support the work of faculty and students with strategic, effective, and efficient administrative services built on a culture of continuous improvement. Leaders and staff work together across campus to find ways to save taxpayers’ and students’ money while investing strategically in ways that support our mission. We make the most of current resources and seek new revenue streams wherever possible. We collaborate across campus to apply innovative technology, identify and share best practices, create economies of scale, and use data to make informed decisions—all while reducing our environmental footprint. We seek out and apply organizational strategies that help us become the nimble and adaptable workforce needed to support today’s students and faculty. We find better and better ways to meet compliance mandates, balance increasing demands, ensure excellence, find efficiencies and streamline processes—all so we can shift time and effort to high-value tasks that support the education, research, and service mission of a university vital to our region’s health and economic vitality.

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Learn more: http://www.washington.edu/2y2d/organizational-effectiveness/
At the UW, we use resources wisely to create savings

We are responsible stewards of precious resources. We feel a profound responsibility to serve the public trust—accountable to tuition-payers and tax-payers alike—in ways that use resources wisely, efficiently, and effectively. We are automating or streamlining processes, setting up shared service centers, and creating economies of scale—all while we improve service to students, faculty, and community partners. We are saving over $70 million a year and have invested in a group of internal organizational consultants that are on track to deliver a return on investment of 10:1. We work to combine fiscal sustainability with environmental stewardship wherever we can.

Through conservation measures, we have saved over $95 million on energy since 2001 and we divert 57% of our waste from landfills to recycling and composting, reducing our garbage bill by nearly $1 million in 2012 alone. It is efforts like these that inspired the Sierra Club to rank the UW as the nation’s 4th “coolest school” in 2012.

Examples include:

- **We have avoided $95.1M in utility bills.**
  We avoided $12.8 million in utility costs in 2012 for a total of $95.1 million in savings over ten years on the Seattle campus. The Facilities Services team at Finance & Facilities fine-tuned lighting, heating, water, and other systems in every building on campus to cut our yearly electric bill by over $4.4 million and our natural gas bill by nearly $1.7 million. Thanks to the efforts of faculty, staff, and students across campus, we’re now diverting 57% of our waste from landfills, saving over $1 million in 2012.

  [Jim Angelosante, Director, Finance and Business Services, Facilities Services, Finance & Facilities, angelosj@u.washington.edu](mailto:angelosj@u.washington.edu)

- **We have saved over $200M through master purchasing contracts and efficiency.**
  We saved over $90 million from 2009 through 2012—$31.4 million in fiscal year 2012 alone—by using master contracts for commonly purchased items such as computers, fuel, and office equipment, even portable toilets and laundry and linen services. UW units save 8% on average when making purchases through master contracts rather than individually. Savings increased when Procurement Services at Finance & Facilities began a Lean process to improve the master contracts process and expand its use. Currently, about 73% of dollars spent at the UW on purchases of commodities are covered by master contracts, up from 46% in 2008.

  Lean processes also increased the use of electronic transactions, which are each $42 cheaper than those using legacy systems, with most of that savings going to UW units. In FY 2012, about 76% of purchases were made electronically, compared to just 50% in FY 2008. Savings campus-wide totaled $20.5 million during FY 2012 and $119 million since FY 2001. As efficiency has increased, central Procurement Services has reduced its personnel by two-thirds, from 162 FTEs in 2001 to 54 in 2012.

  [Mark Conley, Director, Procurement Services, Finance & Facilities, mconley@uw.edu](mailto:mconley@uw.edu)

- **We are saving energy with Green IT.**
  Data centers house the computing, storage, and networks that run the University’s operations, and UW-IT is responsible for keeping them powered and cooled without interruption, 24 hours a day, 365 days a year. In FY 2012, UW-IT improved the operating efficiency of the large-scale data center in the UW Tower, reducing power consumption and lowering carbon production by 3 million pounds, while also slowing the growth of future power needs. Despite a 63% increase in server load during that period, the operating efficiencies of the cooling systems were so great that there was only a 0.3% increase in power use. In FY 2013, UW-IT estimates that it will cut carbon production by more than 5 million pounds—not only reducing greenhouse gases, but also saving about $64,000.

  [Greg Couch, Data Center Technology Manager, UW-IT, gcouch@uw.edu](mailto:gcouch@uw.edu)
• **We are avoiding energy costs while helping develop Smart Grid technology that will benefit the entire Pacific Northwest.**

Students in two of the UW new energy-efficient residence halls are competing to see who can save the most energy—those in Poplar who receive periodic floor-wide measures of energy use or those in Elm who use power strips and wireless control panels to monitor and adjust the energy use of their individual devices in real time. The winner will be determined by data from electrical “smart meters” that measure collective energy use in real time. More than 500 smart meters have been installed in all 216 UW buildings through the Pacific Northwest Smart Grid Demonstration Project, part of an effort by the Department of Energy, through the American Recovery and Reinvestment Act, to provide grants to selected regions to help fund the largest single energy grid modernization in US history. UW students and faculty involved in Smart Grid projects are researching ways to save energy and make the power system more reliable and better able to incorporate renewable energy.

While graduate students and faculty from the Program on the Environment, the Evans School, and the College of Built Environments are analyzing the energy-use behaviors of students in Elm and Poplar to find effective ways to promote conservation, students in the College of Engineering (COE) are using UW-wide smart meter data to develop software that will analyze and report on campus energy usage in near real time, driving down operational costs. For example, the “Tweak the Heat” program demonstrates how automated heating, cooling, and ventilation control systems can automatically and imperceptibly modify building temperatures to reduce consumption during times of forecasted peak demand, when power is more expensive. This project alone, one of six Smart Grid Demonstration Project experiments involving the COE, will save $356,929 in energy costs annually. Estimated annual savings from all Smart Grid demonstrations may total as much as 9.5 million kilowatt hours of electricity and 41 million pounds of steam, cutting utility bills by $1.15 million and carbon emissions by 10,000 metric tons.

UW partners include Seattle City Light and firms McKinstry, Spirae, and Energy Hub. The $3.4 billion Pacific Northwest Smart Grid Demonstration Project also involves the Bonneville Power Administration, five technology partners, and 11 utilities across Washington, Oregon, Idaho, Montana, and Wyoming.

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http://seattletimes.com/html/localnews/2019505610_smartgrid24m.html?prmid=4939
http://www.pnwsmartgrid.org/
http://www.washington.edu/facilities/conserve/measures
At the UW, we promote a culture of continuous improvement and best practice

We want to devote our time and energy towards what matters most—supporting our students and faculty. To do so, we look closely at how we do things and find ways to do them better—faster—cheaper. We bring our culture of research, invention, and innovation to how we run the university. We seek out and apply best practices from the public and private sector and develop new and better ways to do things, sharing what we learn with others.

We tap the ever-increasing supply of data to identify savings, growth, and process improvement opportunities. We prioritize projects, build capacity, and gauge the needs of the campus communities we serve. We eliminate duplication, end outmoded practices, and use technology to automate and streamline. We have increased productivity and improved morale by asking those closest to the work to re-examine the system or process they are responsible for and make it better, leaner. From streamlining the admissions process to setting up shared services for functions like payroll and purchasing, organizations across campus are working together to improve their efficiency and effectiveness.

Examples include:

- **We review Graduate School applications and manage degree process online, saving thousands of faculty and staff hours and giving the UW a competitive edge in recruiting the best students.**
  
  New online tools help the Graduate School handle applications more efficiently, allowing the UW to make offers to top applicants more quickly. The Graduate School expanded the MyGrad web-based program for managing degrees to include online review of the more than 30,000 graduate applications that the UW receives each year. Because each application has an average of 25 pages of information, reviewing all applications online instead of in hard copy could save the UW $225,000 a year in printing costs. Currently, 750 faculty and staff at 50% of UW’s 200 graduate programs are using the MyGrad application review function. As a result, administrators in these departments do not have to manage hard copies or compile review notes and scores, saving an estimated 7,000 hours of staff time annually.

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  http://www.grad.washington.edu/
  
  http://www.grad.washington.edu/mygrad/student.htm

- **We share administrative services to focus on mission-critical tasks and save costs.**
  
  Sharing common administrative services across 20 units has helped the College of Arts and Sciences’ (CAS) Humanities Division shift staff time from paperwork to supporting mission-critical teaching, advising, and research. The changes, developed as part of a Lean effort begun in 2010, have also improved compliance and increased speed of processing and satisfaction, especially when units rethought overall business processes while moving to shared services. College of Arts and Sciences Shared Services (CASSS) staff focus on specific transactional areas such as travel, purchasing, and payroll, gaining in-depth knowledge that benefits the entire College. For example, the CASSS team can relieve departments of the burden of managing visas and honoraria for visiting faculty and collaborators. By the end of 2012, surveys indicated that department satisfaction with CASSS was high (an average of 5 on a scale of 6). One respondent wrote, “If I need input, advice or answers, I can call CASSS instead of having to spend my time calling numerous offices or searching the UW website.” Another unit reported that staff now have “much more time available to spend on advising students.”

  Heidi Tilghman, Manager, College of Arts and Sciences Shared Services Center, and Affiliate Assistant Professor, Germanics, tilghman@u.washington.edu
  
  http://ssc.artsci.washington.edu/

- **We improved business operations so UW police officers can focus on core duties.**
  
  The UW Police Department (UWPD) has been working on initiatives and projects associated with delivering on their 2012 strategic plan. While several areas of operation were highlighted for focus, the
UWPD recognized that processes within the administrative functions would benefit most from analysis and improvement. In partnership with Organizational Effectiveness Initiative (OEI) consultants, the UWPD began efforts to create greater efficiencies while delivering high quality projects and creating more capacity for the department. A number of functions have been identified for streamlining and automation. Expected outcomes include reducing the number of hours spent by sergeants on internal reports by over 80 percent, from 2–3 hours to 45 minutes per shift. Time-saving changes in payroll procedures would decrease the number of payroll databases from three to one, saving 3–5 hours per week, decrease the number of procedural steps for sergeants from nine to two, and cut the hours required for payroll coordination from seven to one per payroll period.

Elizabeth Franklin, Information Specialist/Crime Analyst, UW Police Department, ejell@uw.edu

- **UW Bothell and UW Tacoma streamlined processes and saved money throughout their systems.**
  The UW Bothell (UWB) and UW Tacoma (UWT) are acting on results of detailed analyses of work flow they conducted using Lean methods. UWB Human Resources facilitated 15 brainstorming sessions with groups of staff to generate over 700 ideas to improve efficiency. UWT surveyed staff and employees, trained employees in Lean processes, and worked to enhance a culture of team development. Results of these and other efforts on both campuses include:
  - **Streamlining administrative functions.** UWB switched from paper to electronic reporting for timesheets and purchasing and is implementing centralized planning and web-related services. UWT developed an improved online system for handling Facilities work orders, and an Administrator’s Toolbox as a central place to find forms, timelines, FAQs, and other information easily.
  - **Quicker admissions notifications.** UWT Admissions increased the timeliness of response to admissions by streamlining processes, which contributed to increases in enrollment confirmation and registration of new students. Changes included online managements of transcripts from Washington community colleges and separating the general admissions process from admissions to enter a major, which reduced the number of templates the office handles from 28 to 6.
  - **Saving money on wetlands restoration.** Thanks to sustained efforts by the UW Bothell Facilities Services wetlands and grounds team, 58 acres of wetlands on the UWB/Cascadia CC campus were restored three years ahead of schedule. As a result, the US Army Corps of Engineers (USACE) ended a requirement for monitoring by outside consultants, reducing total project costs by $150,000 to $300,000. The project has received regional and national recognition and is considered one of the best urban restored wetlands in the United States by the USACE and the Washington State Department of Ecology.

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At the UW, despite recent cuts, we are serving our campus community better

We invest strategically. We use time, effort, and resources we save through efficiencies to directly improve service for students and faculty. We create systems that will save them time and hassle, so they can focus on research, teaching, and learning. New or improved services include tools for researchers to more quickly find funding opportunities and connect with collaborators. Instructors can now access a host of new technologies to support their teaching, saving them time grading, and making it easier for students to find materials and support they need so they can study anytime anywhere. And students enjoy enhanced Wi-Fi; live chat with librarians; and new platforms and apps for mobile access to review course content, plan their majors with online advising tools, find and book study rooms, and check on the status of their grades or their financial aid loans. Our administrative efforts are using the resources we have to improve service while meeting the needs and expectations of students and faculty in the digital age.

Examples include:

- **We provide reference support 24/7 through online chat.**
  Through an online service, UW students can get help from reference librarians any time or place they need it. UW Libraries offers reference and information assistance 24/7 through email, text messaging, one-on-one online chat, and instant messaging. UW Libraries is able to provide this service through participation in an international library cooperative in which member libraries work together to provide round-the-clock services across time zones. A UW student requesting help at 3:00 a.m. may reach a librarian based in England and UW reference librarians answer questions from East Coast students burning the midnight oil. Now in its 11th year, the 24/7 AskUs! chat service responds to more than 20,000 questions each year. During 2010–2011 UW reference librarians alone answered 15,000 reference questions online and 60,000 reference questions in person.

  Nancy Huling, Head, Reference & Research Services Division, UW Libraries, hulingn@u.washington.edu
  [http://www.lib.washington.edu/about/contact/](http://www.lib.washington.edu/about/contact/)

- **UW information: There's an app for that. We help students access information and study tools anytime, anywhere, on any screen.**
  - **MyPlan, a Web-based tool to plan your degree**—MyPlan enables students to develop a multi-year academic plan, assess progress against degree requirements, prepare for registration, and have more productive discussions with advisors. MyPlan was developed by UW-IT in partnership with the Student Technology Fee Committees on all three campuses, the Provost, and the advising community.

    Darcy Van Patten, Director, Student Program, UW-IT, darcyvp@uw.edu

  - **The m.UW app, mobile access to public UW info**—The app offers convenient access to dozens of resources, including course catalogs, campus directories, maps, news, sports, and events on the Android, iPhone, BlackBerry, and mobile Web.

    David Morton, Director, Mobile Communications Strategies, UW-IT, dmorton@uw.edu

  - **The MyUW Mobile Web app, mobile access to private MyUW info**—Released this fall, this app provides mobile access to MyUW, letting students view their schedule, email their instructors, locate classrooms on a map, find required textbooks, and access course Web sites on mobile devices. New features enable checking Husky Card and residential balances, seeing final exam schedules, comparing prices on required textbooks, and viewing information about the upcoming quarter.

    Tom Lewis, Director, Academic and Collaborative Applications, UW-IT, tomlewis@uw.edu
- **New Course Notification Service, instant access to availability information**—In development for release in spring 2013, this service will let students opt-in to receive notifications during registration, letting them know when space becomes available in a course of interest. This will help students register for the high-demand courses they need and will collect valuable information that can be used to adjust course offerings. The new service will address needs currently being filled by an unauthorized, third-party, fee-based solution that strains UW’s central systems.
  
  Darcy Van Patten, Director, Student Program, UW-IT, darcyvp@uw.edu

- **Improved financial aid updates**—Financial aid applicants can apply for loans more easily thanks to improved integration between UW Financial Aid and DirectLoans.gov. Financial aid recipients can track their status and be alerted whenever actions must be taken.
  
  Darcy Van Patten, Director, Student Program, UW-IT, darcyvp@uw.edu

- **SpaceScout mobile app, a tool to find the perfect study spot.**—This innovative app showcases over 200 great study spaces in 26 UW Seattle buildings. SpaceScout is available on the Web, in iTunes, and soon for Android. It was developed with UW partners and funded by the Student Technology Fee.
  
  Tom Lewis, Director, Academic and Collaborative Applications, UW-IT, tomlewis@uw.edu

- **We are leaders in teaching and learning in the digital age.**
  UW-IT is working with faculty to find the best new technologies for teaching and learning to provide the support needed to use them effectively. Tools recently piloted include:

  - **Canvas, a next-generation eLearning system**—Students asked for a single platform to host all their classes to make their lives easier. UW-IT worked with faculty to compare current learning management systems (LMS) and selected Canvas, which offers integrated, easy-to-use features for online teaching, learning, and collaboration. This LMS also helps faculty save time and better manage courses with faster tools for grading, an intuitive interface, easy tools for posting media files, and a secure connection to innovative cloud services. Canvas was introduced on all three campuses in Autumn 2012 and endorsed as the uniform LMS for the UW.

    Tom Lewis, Director, Academic and Collaborative Applications, UW-IT, tomlewis@uw.edu

  - **Tegrity, a cloud-based lecture capture solution**—Tegrity can be used to record lectures in a classroom or from the office or home using webcam capture. Once posted online, students can review the recordings—any moment from a lecture, any time, on almost any device. It allows instructors and students to record and publish video, audio, and presentations from most computers without using expensive hardware or software. Students can search, bookmark, and highlight content, make notes, collaborate with each other and their instructor, and use built-in tools to personalize study. Some faculty are using Tegrity as they “flip” their classrooms. In a “flipped” classroom, students view lectures on their own time, while class time is spent on case studies, group projects, complex problem sets, and collaborative work.

    Tom Lewis, Director, Academic and Collaborative Applications, UW-IT, tomlewis@uw.edu

  - **GradePage, an electronic grade-submission system**—Beginning in winter 2009, GradePage made it possible for faculty to turn in final grades online. With the elimination of paper forms in Autumn 2011, 94% of final grades are now turned in on time, up from 75% in Winter 2009. Not only do students get final grades more quickly, but faster grade submission improves a host of student-focused, grade-dependent procedures such as processing scholarships, financial aid eligibility, prerequisites, and honors.

    Tom Lewis, Director, Academic and Collaborative Applications, UW-IT, tomlewis@uw.edu
• **We help UW teams craft successful proposals for interdisciplinary research.**
  Increasingly, research and funding relies on complex, interdisciplinary teams across departments and institutions. As a result, proposal development is becoming more complex. The Complex Proposal Management Group (CPMG) in the Office of Research (OR) helps researchers develop complex, multi-institution projects.

  In 2012, with the help of CPMG, UW teams submitted over $200 million in new proposals, representing 10 UW colleges and departments, and 24 collaborating institutions. The CPMG consults on proposal and budget development and data management; assists with project management, such as coordination among collaboration institutions; and reviews proposals.

  Brooke Trinh, Complex Proposal Manager, Office of Research, bnobrien@uw.edu
  http://depts.washington.edu/research/fostering-collaboration/cpmg.php

• **We provide services and contracts that save students, faculty, and staff money on technology.**
  o **eText, online text delivery at a fraction of the cost**—A pilot project is underway to deliver texts online, enabling students and faculty to search, highlight, and annotate text, and offering social-networking tools to further involve students. It is projected that an electronic text will cost 35% of the textbook’s list price.

    Tom Lewis, Director, Academic and Collaborative Applications, UW-IT, tomlewis@uw.edu

  o **Discounted cell service**—As of the close of 2011, cell phone vendor contracts provide discounts to more than 26,000 UW students, faculty, and staff. On average, each user saves over $100 per year—a combined estimated total of over $3 million.

    David Morton, Director, Mobile Communications, UW-IT, dmorton@uw.edu

  o **Free, cloud-based software**—As of the close of 2011, more than 21,000 students, faculty, and staff use low-cost, UW-branded, ad-free, cloud-hosted services for email and collaboration—UW Google Apps and UW Windows Live—provided in partnership with Microsoft and Google.

    Tom Lewis, Director, Academic and Collaborative Applications, UW-IT, tomlewis@uw.edu