University Cuts $1 Million in Annual Travel Costs

University of Notre Dame embraces online collaboration to cut travel, expand research opportunities, and extend reach.

**Challenge**

The Notre Dame campus covers a few square miles in South Bend, Indiana, but its reach is global. The university has some 1300 faculty and 4000 staff, with satellite campuses and offices across the world. To link this sprawling network of educators and administrators together, the university needed something more than telephone lines and email.

“Many departments have video conferencing equipment, but they are only for those departments’ use,” says Jeffrey Miller, video services associate, office of information technologies at Notre Dame. “But there was no solution for the rest of the campus. Some researchers had great success sharing their work via video conferencing, but many departments simply didn't have the option due to budgetary constraints. It was necessary to find an online tool that all departments could use.”

In 2007, Miller discovered Cisco WebEx™ solutions. “We looked at all the video conferencing options out there, and WebEx technology was simply the best,” he says. “Nothing could beat it in terms of ease of use, flexibility, security, scalability, and training via WebEx University. It works on Macs or PCs. It has 128-bit encryption, which is crucial for offering the security that a research university demands. Anyone can use it. All you need is a computer and a telephone. It was the best way we could increase collaboration and communication among researchers and between professors and students.”

**Solution**

The first meetings using Cisco WebEx® technology were held by the Notre Dame Alumni Association. “They started using WebEx Meeting Center to hold association meetings to train association members how to navigate through their new website,” says Miller. “It was a tremendous success.”

Next Miller deployed Cisco® WebEx technology to the exempt staff. Notre Dame’s University Architect office was the first to see the benefits of computer web conferencing. “The university has a staff of internal architects,” says Miller. “They discuss every new building with other architects in various U.S. cities. Flying those architects in or sending blueprints back and forth was ridiculous. The expenses far outweighed the hourly cost of the architects themselves. Now they use WebEx technology exclusively.”

Academic departments have also embraced WebEx online meeting tools. Graduate students, in particular, are using WebEx technology, so that professors can attend their thesis defenses remotely. “Getting several graduate school professors in the same room at the same time for a proposal or a defense is almost impossible,” says Miller. “Previously, the Graduate School had a policy that students could only use telephones to do their proposals or defenses. After I showed the director WebEx technology, the policy was rewritten so graduate students can now use video conferencing.”

---

**Executive Summary**

**Customer Name:** University of Notre Dame  
**Industry:** Higher Education  
**Location:** South Bend, Indiana  
**Number of Employees:** 1300 Faculty, 4000 Staff  
**Number of Students:** 11731  

**Challenge:**  
- Give administrators and professors more opportunities for global collaboration  
- Employ single digital conferencing solution across multiple departments  
- Record and transmit lectures and courses worldwide for distance learning  

**Solution:**  
- Online technology links professors in Santiago, London, Cape Town, and Washington, D.C.  
- Lab-to-lab video conferencing enables researchers to collaborate in real time  
- Professors share recorded lectures and coursework with students and teachers worldwide  

**Results:**  
- Cut US$1 million from travel expenses within one-year time frame  
- Prevented 4.85 tons of carbon dioxide from entering atmosphere  
- Increased digital collaboration among researchers, professors, and students
Additionally, WebEx technology has spurred international collaboration. The Notre Dame Office of
International Studies now uses the online solution to hold monthly meetings with members in
Santiago, Chile; London, England; Dublin, Ireland; Cape Town, South Africa; and Washington, D.C.
As a result, the office can hold meetings more often and share more information.

The university has also used WebEx technology in some extreme situations. “We actually held a
WebEx meeting with a job candidate in Antarctica,” says Miller. “He was able to do the interview,
share documents and desktops without a problem.”

The university’s Cisco WebEx solution is tied in with a larger Cisco network. Cisco IP phones will
be standard on campus. “At Notre Dame, we use a really wide range of Cisco technology across
campus,” says Miller, “WebEx technology is a natural extension of that.”

“We looked into all the video conferencing options out there, and WebEx technology was simply the best.
Nothing could beat it in terms of ease of use, flexibility, security, or scalability.”

Jeffrey Miller, video services associate, office of information technologies, University of Notre Dame

Results

Part of Miller's job is keeping detailed records of WebEx technology use. He estimates that Notre
Dame was able to cut approximately $1 million in travel expenses during 2009 alone by using
WebEx conferencing. “I keep a spreadsheet of all the meetings I do,” he says. “I know when each
meeting was, its purpose, location, department, who the host was, how far away the participants
were. Then we can use the WebEx Carbon Calculator to estimate how much those meetings would
cost if we held them in person. It's staggering. The savings included airfare, travel time, hotel costs,
and food costs. And we avoided burning 407,000 gallons of jet fuel, which would have contributed
4.85 tons of carbon dioxide into the atmosphere.”

Cisco WebEx technology has also allowed the university to do things that it simply could not do
before. For instance, a professor in Paris now transmits his lecture on the philosophy of
mathematics all across France. He also records it so students in other parts of the world can watch
it later. “Many professors are recording their lectures,” says Miller. “Students can concentrate on
what they’re saying, then take notes from the recording later. They don't have to take notes during
class. They can engage more actively with the professor and their fellow students. This increases
the professors ‘teachable moments’ while in class.”

WebEx solutions have also helped students and teachers stay connected. “There was a professor
who needed to go to Geneva for a conference during the last week of class,” says Miller. “The
students were to give presentations for their final exam. A laptop with a webcam was set up in the
classroom, and she was able to watch the presentations live in her hotel room in Switzerland. She
could give feedback right away. Each presentation was recorded so she could review them later.
WebEx technology was the perfect solution to her problem.”
Next Steps

“Going forward, I see WebEx solutions helping tremendously with teaching, research, and administration,” says Miller. “Researchers will have greater access to colleagues around the world. Professors will have an easier time staying in touch when they’re on sabbatical. And distance learning can be expanded. I see a lot of exciting opportunities here.”

For More Information

To find out more about Cisco WebEx solutions, go to http://www.cisco.com/web/products/webex/index.html.

Product List

Cisco WebEx