U. of Cincinnati Builds a System to Track Its Place in the World

By Karin Fischer

When Mitch Leventhal was being considered for the position of vice provost for international affairs at the University of Cincinnati, he asked nearly as many questions of his interviewers as he answered: Which foreign universities send the largest number of international graduate students there? How many faculty members were abroad, and where? What partnerships did the university have in China? In India? In Kenya?

He got few satisfactory responses. And so, in his final interview, he made a bold proposal: Hire me, and I will put in place a comprehensive and dynamic data-management system that will allow the university to track the breadth of its international activities and agreements.

Mr. Leventhal got the job, and in the four years since, he has worked to develop UCosmic, the University of Cincinnati Online System for Managing International Collaboration.

Multinational corporations have no trouble describing their international activities, he says. They know the source of their raw materials, can detail their activities in key markets, and have global strategies.

But while many American colleges, and research universities in particular, boast an increasingly complex web of international work, few have effective mechanisms in place to tally and monitor those efforts. That leaves the universities with an incomplete picture of their own international engagement.

"Because we cannot answer fundamental questions about the scope of our activity," Mr. Leventhal says, "we can't make the most of our relationships abroad."

UCosmic is helping Cincinnati be more deliberate in its international work. The data system aids its international recruiters in focusing their efforts, and it allows top administrators to identify areas of the world where existing activity could yield more high-level partnerships. Through UCosmic, campus officials
realized, for example, that they enroll a "significant" number of graduates of Anna University, in India, but had never reached out to engage the engineering-and-science institution directly.

Other colleges have taken note, and Mr. Leventhal is exploring ways to open-source UCosmic's software and make the system available on a fee-paid membership basis.

Reams of Data

Mr. Leventhal began the Herculean effort with several advantages. Prior stints at technology companies gave him a grasp of the technical infrastructure needed. And the university's president at the time, Nancy L. Zimpher, was a strong believer in internationalizing the campus.

Still, the project almost went off the rails at the outset. The university's information-technology department had a lengthy backlog of programming work, and even if Mr. Leventhal could have UCosmic given top priority, the estimated cost, $750,000, would break his budget.

Instead he recruited Daniel J. Ludwig, who was then a graduate student in information systems and an experienced software developer.

Mr. Leventhal proposed that he and Mr. Ludwig design the system but periodically turn to the information-technology department to assess components and seek advice on aligning UCosmic with other programs and platforms at Cincinnati.

Mr. Ludwig says he spent the first six months working on UCosmic from a desk in the department, lobbing questions at developers there. The project's primary expense has been Mr. Ludwig's salary.

Confronted with reams of data, Mr. Leventhal chose to begin by tabulating Cincinnati's many agreements with foreign institutions; no such inventory existed. (By contrast, the university had a "bad but workable" database of homegrown study-abroad programs, he says.) Graduate assistants combed through the hundreds of memoranda of understanding, going back 25 years, stuffed into 18 cubic feet of file-cabinets that Mr. Leventhal had inherited. They scanned documents and hunted down the contacts listed to determine the status and outcome of each partnership.

Equally time-consuming was an effort to account for international students on the campus, most of them in graduate studies. The College Board maintains a set of commonly accepted identification codes for American colleges, but no such list exists for foreign institutions. As a consequence, their graduates, be they from...
Cambodia or Canada, were lumped together in a single "foreign" category. Mr. Ludwig worked with the registrar's office to develop codes for some 8,200 overseas universities, so that UCosmic could track which ones were feeding students to Cincinnati.

In some cases, UCosmic integrates data from existing sources to permit new and varied searches or services. In others, Mr. Leventhal and Mr. Ludwig had to start from scratch. Faculty members, for example, have had to be cajoled to enter and update information about their overseas educational experiences and international research.

While the quantity of data is great, UCosmic's organizational structure is relatively straightforward. It is built around geography, designed, Mr. Leventhal likes to say, to answer the question, "Where?"

Users can search by country or region or by type of activity, such as student exchanges and faculty research. They can create individual institutional profiles. Pull up Tsinghua University, in China, and listed is information about its institutional collaborations with Cincinnati, joint research projects, and graduates who have gone on to study at Cincinnati.

Academic departments at Cincinnati have already begun pooling resources to recruit top-flight graduate students, says William B. Connick, an associate professor of chemistry, and UCosmic may be a tool to further focus their efforts on strong international feeder institutions.

Sooshin Choi, an associate professor of design, relies on the system to advise students about which prestigious international design schools have exchange agreements with Cincinnati. And when several companies had to pull back internship offers to students on a co-op program in Japan this year, university officials were able to quickly search UCosmic, which includes information about Cincinnati's corporate partners and their overseas work, and find last-minute placements.

"The clock was ticking," says Robert G. Lees, a consultant who is helping the university build its international corporate ties. "They were able to mine UCosmic to find a whole new crop of companies."

UCosmic has also helped Cincinnati develop a strategy for working in sub-Saharan Africa, by quickly identifying university projects and partnerships in the region, and enabling the institution to figure out where it wants to focus future efforts.

Difficulties Along the Way
U Cosmic's development has not been without hitches. The faculty data, for one, is only as good as what professors themselves file and maintain. The university foundation has been hesitant to turn over information about overseas alumni. U Cosmic is not compatible with Cincinnati's human-resources database, which could have given Mr. Leventhal quick and comprehensive access to faculty members' international work and educational experience. A module to track faculty and staff members' foreign travel—which could help the university negotiate discounts and quickly send out emergency guidance—has been completed but is stalled, as various departments and offices work out policies for overseas trips.

Efforts to make U Cosmic available to other institutions have also slowed because of issues with technological compatibility (U Cosmic uses a Microsoft platform, while many other colleges and universities do not) and difficulty in getting buy-in from information-technology departments at potential partner colleges.

Mr. Leventhal is also competing, in a fashion, with commercially available products that promise to help colleges track their international activities. He says U Cosmic, however, offers a more holistic approach to tracking international education activities than many commercial products do.

Still, several of Mr. Leventhal's colleagues elsewhere say they continue to be interested in adapting U Cosmic for use at their own institutions. "U Cosmic could give us a better view of where we are," says Stephen C. DePaul, director of global initiatives at the University of Texas, "which would help us be more strategic."

Innovators in Internationalization

This is the fourth in an occasional series on how colleges have tackled some of the basic challenges of internationalizing their campuses.

Mitch Leventhal, vice provost for international affairs at the University of Cincinnati, and Daniel J. Ludwig, Web developer for the U Cosmic system, will be answering readers' questions during a live online chat on Thursday, September 10, at 12 noon U.S. Eastern time. If you would like to submit questions in advance, please e-mail livechat@chronicle.com

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